



COMMON SUBJECT **LIFE SKILLS**



**JD/JW CADETS' HAND BOOK
NATIONAL CADET CORPS**

MASTER INDEX : LIFE SKILLS/COMMON SUBJECTS (JD/JW)

SER. NO.	CODE	SUBJECT	PERIODS		TYPE	PAGE
			1st Yr	2nd Yr		
	(CODE - ME)	<u>MORALS & ETHICS</u>	(03 PERIODS)			
1	ME I	Moral Values and Ethics	1		T	1
2	ME II	Honesty and Integrity	1		T	11
3	ME III	Honour Code		1	T	22
	(CODE - PDLS)	<u>PERSONALITY DEVELOPMENT & LEADERSHIP</u>	(05 periods)			
4	PDLS I	Leadership Traits	1		T	32
5	PDLS II	Desirable Habits for an Effective Personality		1	T	43
6	PDLS III	Posture, Bearing & Turn-out and Etiquettes	1		T	53
7	PDLS IV	Time Management, Team Work and Communication Skills		1	T	65
8	PDLS V	Critical Thinking, Decision Making & Reading Habits		1	T	78
	(CODE - CS)	<u>CYBER SCIENCE</u>	(05 PERIODS)			
9	CS I	Cyber and Mobile Security Awareness	1		T	88
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	(CODE - CC)	<u>CAREER COUNSELLING</u>	(02 PERIODS)			
14	CC I	Entry in Armed Forces Agniveer		1	T	145
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	(CODE - IC)	<u>INNOVATION CONCEPT</u>	(02 PERIODS)			
16	IC I	Creative Thinking and Introduction to Innovation Concepts		1	T	166
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	(CODE PMW)	<u>PHYSICAL & MENTAL WELLNESS</u>	(12 PERIODS)			
18	PMW I	Physical Fitness	1	-	T	190
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23	PMW VI	Mental Wellness	2	-	T	270
24	PMW VII	Stress Management	-	2	T	291
25	PMW VIII	Diet & Nutrition	-	1	T	312
26	PMW IX	Yoga	-	2	T	325
		TOTAL PERIODS	12	17		

MORALS & ETHICS

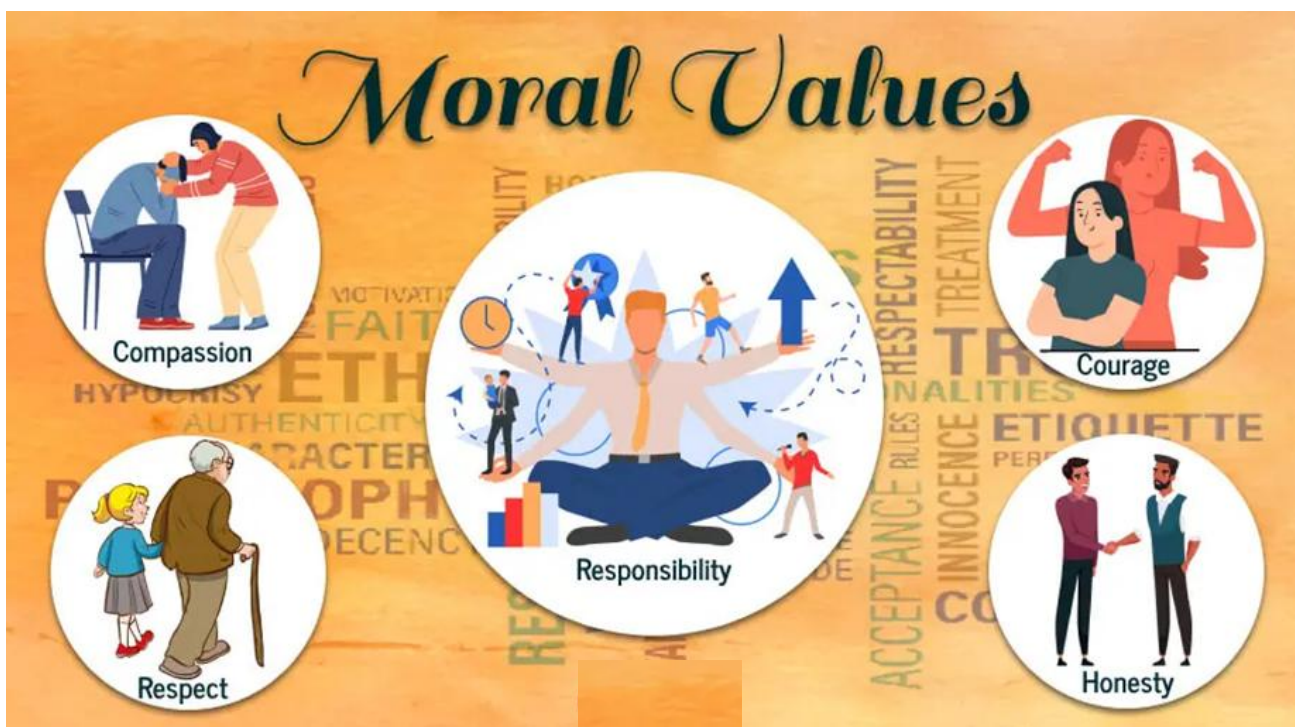
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CHAPTER WISE INDEX : ME(JD/JW)

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MORAL AND ETHICS (JD/JW)

CHAPTER ME I : MORAL VALUES AND ETHICS



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture
Year : 1st Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/Lesson Plan; Computer, OHP, Screen, Board, Markers, Display Charts.

Time Plan

- Introduction : 03 Mins
- Aim : 02 Mins
- Part I : 10 Mins
- Part II : 10 Mins
- Part-III : 10 Mins
- Conclusion : 05 Mins





INTRODUCTION

1. Moral values comprise of qualities relating to character and conduct which constitute personal individuality. Individuals with high moral values are the conscience of society. The strength and the entire fabric of an organisation depends upon individual character of its troops and leaders. Character gives us the qualities of proved honour, rectitude and consistency and these command the confidence and respect of all. Moral values, thus, are the aggregate of the following qualities:-

- (a) Integrity.
- (b) Honour and dependability.
- (c) Sense of responsibility towards others and to the country.

AIM

2. The aim of this lesson is to provide an insight to Cadets in developing moral values and to serve as a constant reminder of their professional and moral obligations to the society.

Moral Values





PREVIEW

The lecture will be conducted in the following parts: -

- (a) Part I : Aspects of Moral Values.
- (b) Part II : Character Development.
- (c) Part III : Moral Values and Character Traits In Practical Life

LEARNING OBJECTIVES

- Aspects and effectiveness of moral values
- Character development
- Moral values and character traits in practical life

PART I : ASPECTS OF MORAL VALUES

3. Morals and Ethics: Definitions and Differences.

(a) Morals.

(i) **Definition.** Morals refer to the beliefs and values that individuals hold about what is right and wrong. These are often shaped by cultural, religious, and personal experiences.

(ii) **Nature.** Morals are subjective and can vary significantly between different people and cultures. They often guide personal behaviour and decision-making.

(b) Ethics.

(i) **Definition.** Ethics refers to a systematic framework for determining what is right and wrong, often in professional or societal contexts. It involves the study of moral values and rules.

(ii) **Nature.** Ethics is typically more objective and universal than morals, often codified in professional guidelines or societal laws. It provides a structured approach to addressing complex dilemmas.

(iii) **Examples.** In a business context, ethical guidelines might include principles like transparency, integrity, and accountability. For instance, a company might have an ethical obligation to ensure fair labour practices.

DID YOU KNOW?

That Moral Values.....

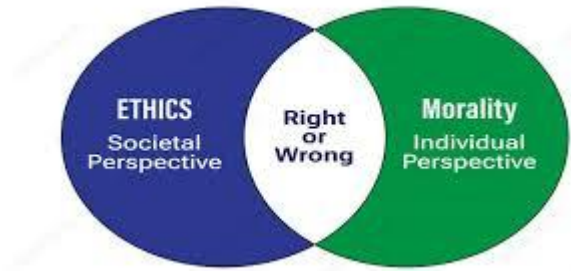
- Build Character
- Help to Tell Right From Wrong
- Determine our Behaviour
- Counter Bad Influence From Peers
- Boost Self-Confidence
- Help Cope With Difficult Situations



(c) **Key Differences.**

(i) **Subjectivity vs Objectivity.**

Morals are personal and subjective, while ethics are often more universal and objective.



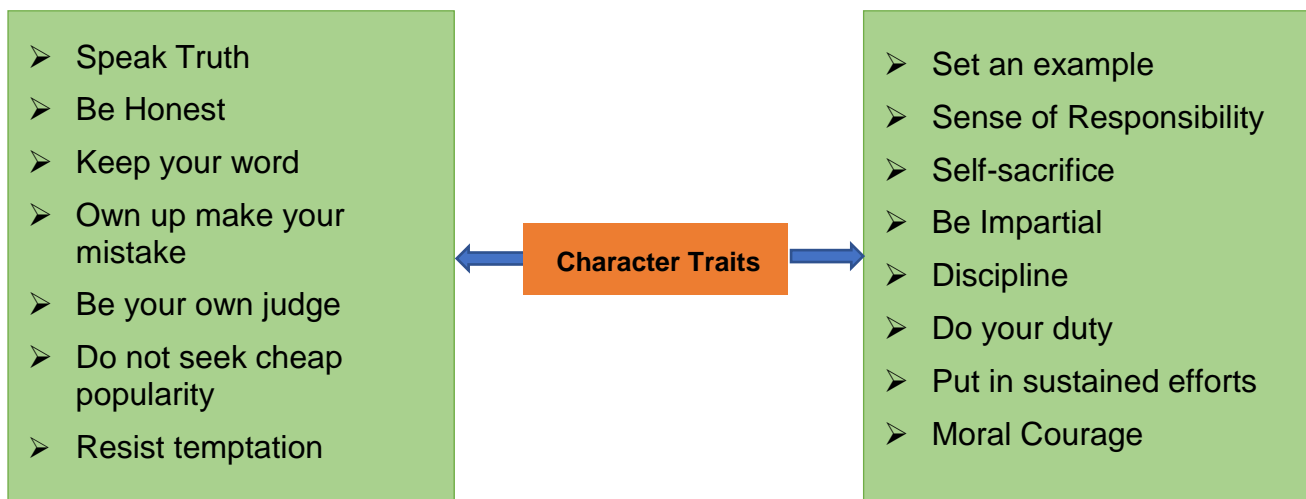
(ii) **Individual vs Collective.**

Morals are individual beliefs, while ethics tend to reflect collective standards within a society or profession.

PART II : CHARACTER DEVELOPMENT

4. **Character.** The crown and glory of life is character. It is the proudest possession of any person. It is a formal statement of the qualities of a person. Character cannot be thrust upon; it must be inborn. “A man should be upright, not be kept upright” is a famous quote. There must be no let up or slacking of any of the qualities that make up character, for remember, we are always under critical observation.

5. **Character Traits.** These are defined as the individual qualities or attributes that make up a person's overall character. Certain character commandments have been listed below and their observance will go a long way in inculcating a sense of propriety and moral uprightness in you all.



(a) **Speak the Truth.** The consequences of speaking a lie are enormous and irretrievable. A lie once told has the effect of snow balling.

(b) **Be Honest.** When you talk of honesty, it means total honesty. Honesty in thought, word and deed.

(c) **Keep your Word.** Make it a point of honour that you keep your word once it is given. Your colleagues and superiors will soon recognize this and respect you for it.



- (d) **Own Up Your Mistake.** A leader must have the moral courage to admit his mistakes, however unpleasant the repercussions. “Always take a little more than your share of blame, a little less than your share of credit.”
- (e) **Be Your Own Judge.** Be honest even when you are not under supervision, for it is then you will be under the critical eye of the men you command. You will lose your own self-respect, if you do something wrong because you are not under observation.
- (f) **Do Not Seek Cheap Popularity.** Confucius has said, “The wise man is informed on what is right, the inferior man is informed on what will pay”. It is only the inferior man who has consequently to seek cheap popularity; a man of character is automatically loved for his qualities of honesty, self-sacrifice and attention to duty.
- (g) **Resist Temptation.** Only the very immature succumb to the temptations of immediate pleasure. Always live within your means and never covet what you cannot afford or what does not rightfully belong to you.
- (h) **Set an Example.** By doing this, you inspire others to emulate you. You should not do things, which you do not expect others to do. There should be no double standards and strict conformity between what you say and what you do. Do not abuse your privileges and misuse stores and equipment placed in your care.
- (j) **Sense of Responsibility.** Seek responsibility and take responsibility for your actions.
- (k) **Self-sacrifice.** The interests of your country and your colleagues must be above your own, all the time. Field Marshall Slim has very aptly said, “If you have the qualities of self-sacrifice, your juniors will follow you not only in good times, but in bad times, too.”
- (l) **Be Impartial.** Be just and impartial in all your dealings with your subordinates. Have no favourites, nor must you victimize any subordinate. Never be prejudiced because of caste, creed, race or gender.
- (m) **Discipline.** Your personal discipline should be exemplary and it should be enforced strictly. Be disciplined in all you do, whether on parade or off parade. You will never be obeyed unless you obey yourself. Never compromise your orders – it is better to cancel them.
- (n) **Do Your Duty.** This also means carrying out orders even when you disagree with them or when conditions are difficult. It also means doing one’s best without considerations of reward or recognition.
- (o) **Put in Sustained Effort.** Anyone can put in effort to accomplish a task when not under strain and for a short period. A man of honour strives to carry it out under all conditions, always. Sustained effort is an aspect of dependability. Do not waste an instant.
- (p) **Moral Courage.** Have the courage to call a spade a spade, but do not be obstructive just for the sake of not being called a “yes man”.



PART III : MORAL VALUES AND CHARACTER TRAITS IN PRACTICAL LIFE

6. Moral values consist of acts, well and honourably performed. Our habits, behaviour and conduct are reflections of our values. A cadet must conduct himself/herself such that his/ her personal habits are not open to censure. Tendencies toward selfishness and self-indulgence in luxuries not available to everyone in general are to be strictly avoided.

7. **Uprightness.** Be morally straight and upright. Like loyalty, this is one quality in which there can be no compromise. This is one quality which directly affects the level of trust people will have in us, and trust once lost, is never recovered.

8. **Chivalry and Gallantry.** Chivalry means bravery and courtesy while Gallantry refers to bravery and firm unshaken courage. Gallantry and chivalry collectively imply the courage to stand up for our cherished ideals, protect the weak & the oppressed and to subordinate one's self interests in favour of those of society at large.

9. **Loyalty.** Loyalty is the quality of faithfulness to the society, country, army, unit, seniors, subordinates and colleagues. Every action of yours must reflect loyalty to your command and to your superiors, for loyalty is a two-way traffic, equally applicable to the giver and the receiver.

10. **Self-Respect.** Before we expect to be respected by others, we must learn to respect ourselves. It is the result of staying true and uncompromising to our values. The more we engage in behaviour aligned with our beliefs and values, the more self-respect we generate. Negative actions like cheating, stealing, engaging in anti-social vices, unfaithfulness, gaining advantages at the expense of others, all lead to loss of self-respect. In order to earn self-respect, certain essential aspects have to be practised. These are: -

- (a) Proper and courteous behaviour.
- (b) Respect to elders, peers and subordinates.
- (c) Leading a honest life and observing the laws of the land.
- (d) Self-control and temperance in behaviour and language at all times.

Some Ways to Inculcate Moral Values & Character Traits:-

- Be a role model
- Practice empathy
- Be respectful
- Be compassionate
- Have integrity
- Make ethical decisions
- Speak the truth
- Treat others well



HIGHER ORDER THINKING SKILLS (HOTS)

- You are an NCC Cadet tasked with organizing a major event for your unit. During the preparation, a senior cadet has asked you to overlook some minor safety violations in order to ensure the event runs smoothly and is on schedule. The senior cadet assures you that "no one will notice," and the event is crucial for maintaining unit's reputation. How will your sense of integrity guide your decision-making in this scenario?

CONCLUSION

11. The observance of these qualities will help in enhancing moral values, develop character traits and serve as a guide to be correct, fair & just in performance of duties. The basic qualities of honesty, self-sacrifice and devotion to duty are inherent to real leadership. A person of high moral values and character shines like a candle; keep this candle lit so that the others can follow you.

SUMMARY

- Morals refer to the values that individuals hold about what is right and wrong. These are shaped by our beliefs, personal experiences and societal factors.
- Ethics are guidelines established by communities or specific groups outlining acceptable and unacceptable actions or behaviours.
- Character traits are defined as the individual qualities or attributes that make up a person. Important principles like truthfulness, honesty, staying true to one's word and self-sacrifice are essential components of a leader's character.
- True leadership is not about seeking recognition or popularity, but about embodying qualities like moral courage, fairness, and a commitment to duty.
- Leaders always lead by example and take responsibility for their actions. Ultimately, leaders of high moral character inspire others and earn respect through actions that align with their values.



ASSESSMENT EXERCISE

Multiple Choice Questions

- Q1. Which of the following is NOT a moral value discussed in the lesson?**
- (a) Integrity (b) Fairness
(c) Selfishness (d) Responsibility
- Q2. What is the definition of ethics according to the lesson?**
- (a) Personal beliefs about right and wrong
(b) A framework for determining right and wrong in professional contexts
(c) The study of moral values
(d) A set of cultural traditions
- Q3. Which of the following is a key ingredient of integrity?**
- (a) Self-interest (b) Justice
(c) Deceit (d) Laziness
- Q4. Which concept involves subordinating one's personal interests for the greater good of society?**
- (a) Self-respect (b) Self-sacrifice
(c) Loyalty (d) Integrity
- Q5. What does the lesson suggest about “keeping your word”?**
- (a) It is optional depending on the situation
(b) It is a point of honour and builds respect from others
(c) It is not necessary if it's inconvenient
(d) It should only be kept if it brings personal gain
- Q6. What is the main role of a leader in terms of moral courage?**
- (a) To avoid difficult decisions
(b) To conform to popular opinions
(c) To stand firm in doing what is right, even when difficult
(d) To seek recognition for decisions
- Q7. Which of the following best describes chivalry as discussed in the lesson?**
- (a) The quality of politeness and respect in social settings
(b) Bravery and courtesy in combat and service
(c) Pursuit of personal glory and recognition



- (d) Strict adherence to laws and regulations
- Q8. Which of the following is NOT a recommended action for earning self-respect?**
- (a) Respecting elders and subordinates
(b) Breaking laws for personal gain
(c) Leading a disciplined life
(d) Controlling behaviour and language
- Q9. Which of the following is an example of self-sacrifice?**
- (a) Prioritizing personal success over the well-being of others
(b) Protecting the weak and oppressed, even at personal cost
(c) Seeking popularity and approval from others
(d) Ignoring the needs of society for personal pleasure
- Q10. What does moral courage involve?**
- (a) Always agreeing with authority
(b) Calling out wrongdoings and standing by the truth
(c) Avoiding conflict at all costs
(d) Ignoring personal convictions for convenience.
- Q11. What are qualities of Chivalry?**
- (a) Bravery (b) Justice
(c) Courtesy (d) Both a & c
- Q12. What is an essential aspect of self-respect?**
- (a) Self-control in behaviour and language at all times.
(b) Self-sacrifice
(c) Sense of humour
(d) Spirituality
- Q13. Morals can be shaped by:-**
- (a) Cultural experiences.
(b) Religious experiences.
(c) personal experiences.
(d) All of the above
- Q14. What is moral courage?**
- (a) To follow all rights and wrongs



- (b) standing firm in doing what is right
- (c) doing wrong
- (d) raise your voice

Q15. How to inculcate moral values in practical life?

- (a) With courage
- (b) Be a role model
- (c) Self-Discipline
- (d) Courtesy

Short Answer Questions

- Q1. What are the key moral values discussed in the lesson?
- Q2. Define the term integrity as mentioned in the lesson.
- Q3. How does self-respect contribute to an individual's character?
- Q4. Why is loyalty considered a two-way traffic?
- Q5. How can discipline impact your performance as a cadet?

Long Answer Questions

- Q1. Explain the differences between morals and ethics. Provide examples of both in personal and professional life.
- Q2. Discuss the concept of integrity and explain why it is considered an essential quality for leadership. Include its key ingredients such as honesty, selflessness, and justice.
- Q3. Describe the qualities of a good leader as outlined in the lesson. How do these qualities help in the development of both moral values and character?
- Q4. What is character development? Discuss how following certain commandments like "speak the truth" and "be honest" can help in building a strong character.
- Q5. Elaborate on the importance of loyalty in leadership. How does it contribute to the cohesion of a group or organization?

MORAL AND ETHICS (JD/JW)

CHAPTER ME II : HONESTY AND INTEGRITY



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture
Year	:	1st Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/Lesson Plan; Computer, OHP, Screen, Board, Markers, Display Charts.

Time Plan

• Introduction	:	03 Mins
• Part I : Importance of Honesty	:	10 Mins
• Part II : Importance of Integrity	:	12 Mins
• Part III : Expectations From an NCC Cadet	:	10 Mins
• Conclusion	:	05 Mins





INTRODUCTION

1. Honesty and integrity are two of the most desirable qualities of leadership.

AIM

2. To foster among cadets the importance of Honesty and Integrity.

PREVIEW

The lecture shall be conducted in following parts:-

- (a) Part I : Personality, Honesty and its Importance.
- (b) Part II : Integrity and its Importance.
- (c) Part III : Expectations from an NCC cadet.

LEARNING OBJECTIVES

- Understanding Honesty and Integrity
- The Role of Honesty in Relationships
- The Importance of Integrity
- Honesty vs. Integrity
- Expectations from an NCC Cadet
- Applying Ethical Values in Leadership
- Commitment to the NCC Code of Conduct

PART I : HONESTY AND ITS IMPORTANCE

3. **Honesty.** Honesty is the quality of being truthful, sincere, and free from deceit in our dealings with others. It involves not only telling the truth but also being genuine in one's actions and intentions. It is one of the most important character traits of an individual which has following positive outcomes:-

4. **Fostering Trust.**

- (a) **Foundation of Relationships.** Honesty is a cornerstone of trust in any relationship, whether personal or professional. When individuals are honest, they create a safe space where others feel secure and valued.
- (b) **Consistency in Behaviour.** Honesty leads to consistent actions, allowing others to predict how someone will behave, which further enhances trust.



5. **Strengthening Interpersonal Connections.**

(a) **Open Communication.** Honest communication encourages openness. When people feel they can speak freely without fear of judgment or dishonesty, it leads to deeper and more meaningful connections.

(b) **Conflict Resolution.** Honesty allows for the addressing of issues and conflicts directly. By being truthful, individuals can tackle problems more effectively, leading to healthier relationships.

6. **Enhancing Reputation.**

(a) **Dependability.** Honest individuals often gain a reputation for reliability and dependability. This positive perception can lead to increased respect and admiration from others.

(b) **Professional Success.** In the workplace, honesty fosters a positive culture. Employers and colleagues are more likely to trust and collaborate with those who are known for their reliability.

7. **Encouraging Accountability.** Honesty encourages individuals to take responsibility for their actions. This accountability strengthens relationships, as others appreciate sincerity and the willingness to own up to mistakes.

8. **Promoting Authenticity.** Honesty allows individuals to be their authentic selves, which fosters genuine connections. When people are true to themselves, they attract others who appreciate them for who they are.

DID YOU KNOW?

- Contrary to the popular perception that business and ethics don't mix, one of India's biggest IT companies built its foundation on Honesty and Integrity.
- As a policy, the company never paid bribes to secure any contract.
- It was among one of the first Indian companies to start publishing full transparent financial disclosures setting a precedent of honesty.
- The company also has an internal mechanism to report unethical behaviour, thus promoting honesty among the employees.

PART II : INTEGRITY AND ITS IMPORTANCE

Integrity - Concept and Significance

9. If honesty is manifested in our dealings with others, integrity is more primary and is in relation to ourselves. In essence, it is 'honesty with oneself' and involves consistency in actions, values, and principles with regards to one's ethical beliefs. A person with integrity acts according to his/her values irrespective of external factors.



10. **Key Components of Integrity.** Are as under:-

(a) **Honesty with Oneself.** Staying true to identity and values of self.

(b) **Doing what is Right.** Following the right path and doing one's duty, what the ancient Indian texts use to describe as following *one's dharma* (implying duty, not to be confused with religion), meaning doing what one is supposed to do and taking the rightful action in any given circumstance.



(b) **Consistency.** Adhering to moral and ethical principles consistently across all situations, rather than selectively based on convenience.

(c) **Self-Respect.** Staying true to our values, especially in testing times, determines our self-respect which in turn defines our sense of self-worth and self-belief. Lack of respect in our own eyes cannot be made up by the respect we may get from others.

(d) **Courage.** Having the bravery to stand up for what is right, even in the face of adversity or pressure.

(e) **Accountability.** Taking responsibility for one's actions and decisions, and being willing to accept the consequences

11. **Importance of Integrity.**

(a) **Bedrock of Honesty.** Integrity is the foundation stone of honesty. Staying true to our inner self reflects in our relationship with others and external environment. **Higher the degree of integrity, more unshakeable will be our honesty.**

(b) **Credibility.** A reputation for integrity enhances personal and professional credibility. People with integrity are often respected and admired, leading to better opportunities and relationships.

(c) **Trust Building.** Integrity fosters trust in relationships, whether personal or professional. When others know that a person acts with integrity, they feel secure and are more likely to rely on that individual.

(d) **Inspirational Effect.** Individuals who demonstrate integrity can inspire others to act similarly. Their behaviour sets a standard for those around them, encouraging a culture of honesty and ethical conduct.

(e) **Decision Making.** Integrity serves as a guiding principle for making ethical decisions. It helps individuals navigate complex situations by providing a clear framework for evaluating choices.

(f) **Self-Worth.** Living with integrity contributes to a sense of self-worth and personal satisfaction. Individuals who act in alignment with their values tend to experience greater fulfilment and inner peace.

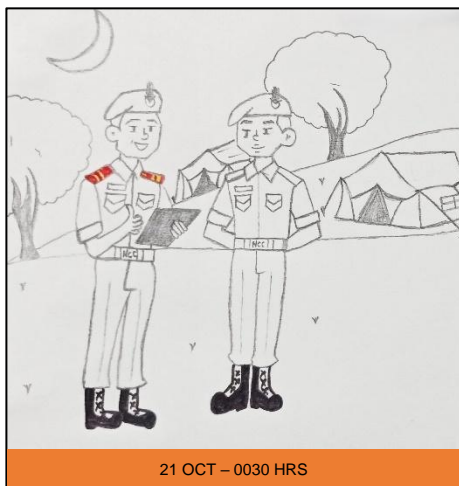
Difference Between Honesty and Integrity

12. The terms of honesty and integrity are often used interchangeably but, as explained, there is a basic difference. **Honesty comes into play in our dealings and transactions with others while integrity represents our dealings with the self. It is doing the right thing irrespective of the circumstances.**

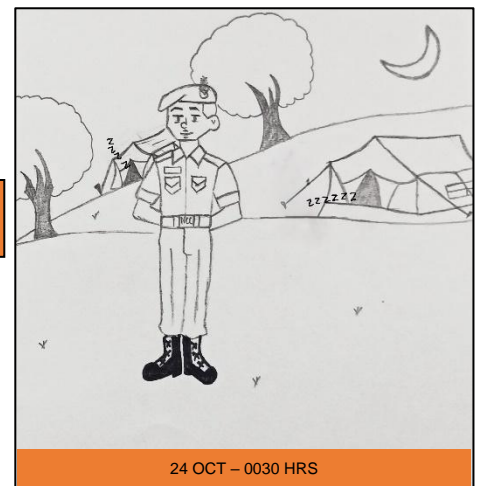


13. **Example.** To understand this with an example, if you are tasked to be on a sentry duty on a chilly night during a camp and you are found to be active and alert by any official coming for duty-check, you will be considered to be doing your duty very 'honestly'. Your 'integrity' in doing the same duty though will be tested when you know no one is going to come to check you, so there is neither any fear of being caught sleeping nor hope for any appreciation for doing it properly. It is said that 'Character is, what we are in the Dark', meaning our real self surfaces when we think we are not under watch. Staying true to your duty in such scenarios, is the real test of life you must aim to pass.

14. **So integrity is doing what is right without any fear or apprehension of being checked, without expectation of name & fame or the lure of award/reward. This is what makes it a bigger virtue than honesty and something to strive for to the highest degree. Integrity in its true sense necessitates detachment from all external considerations, positive or negative.** Where integrity is there, honesty automatically follows. The opposite is not necessarily true.



INTEGRITY





PART III : EXPECTATIONS FROM AN NCC CADET

15. The National Cadet Corps (NCC) in India is a youth organization that promotes discipline, leadership, and character building among young citizens. Here are some key expectations, rules, and regulations that govern the conduct and behaviour of NCC cadets:-

16. **Integrity and Honesty.**

(a) **Integrity.** Cadets must aim to have impeccable standards of integrity. This one quality alone will pave the way for most other desirable qualities. Stick to saying and doing 'what is right', no matter the circumstance or opposition.

(b) **Honesty.** With unwavering integrity as a base, steadfast honesty will automatically manifest in our dealings with others. That will help make us a trustworthy and credible leader.

17. **Dress Code.**

(a) **Uniform.** Cadets are required to wear their uniforms correctly and maintain a smart turnout.

(b) **Personal Hygiene.** Cadets should maintain high standards of personal hygiene and grooming.

18. **Participation.**

(a) **Active Engagement.** Cadets are expected to participate actively in all training programs, camps, and events organized by the NCC.

(b) **Team Spirit.** Cooperation and teamwork are essential, and cadets should work harmoniously with fellow cadets.

19. **Behaviour.**

(a) **Positive Attitude.** Cadets should exhibit a positive attitude, willingness to learn, and commitment to the values of the NCC.

(b) **Discipline.** Cadets are expected to be punctual and attend all training sessions, parades, and events on time. Cadets must also follow the orders and instructions of their superiors and appointments.

(c) **Respect and Courtesy.** Treat people with respect and you will get paid back in the same coin. Use of polite language and due courtesy helps build cordial interpersonal relations.

20. **Health and Fitness.**

(a) **Physical Fitness.** Cadets are encouraged to maintain physical fitness through regular exercise and participation in sports and physical training.



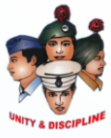
- (b) **Substance Abuse.** The use of drugs, alcohol, or any harmful substances is strictly prohibited.
21. **Community Service.** Social Responsibility: Cadets should engage in community service and contribute positively to society, reflecting the values of leadership and service.
22. **Communication.**
- (a) **Reporting Structure.** Cadets must adhere to the reporting hierarchy for any grievances or issues, addressing them through the proper channels.
- (b) **Feedback.** Constructive feedback is encouraged, and cadets should be open to receiving and giving feedback in a respectful manner.
23. **Respect for Rules.**
- (a) **Adherence to NCC Guidelines.** Cadets are expected to follow all NCC guidelines and regulations laid down by the organization and their respective units.
- (b) **Legal Compliance.** Cadets must comply with all laws and regulations of the country and uphold the dignity of the NCC.

HIGHER ORDER THINKING SKILLS (HOTS)

- You are a cadet assigned a leadership position during an NCC camp. One evening, while on duty, you notice that your best friend, who is supposed to be on night duty, is clearly asleep and not performing his duty. However, no one else has witnessed this. What action will you take?

CONCLUSION

24. Integrity and honesty are essential qualities for building trust and strengthening interpersonal relationships. Integrity creates a foundation and paves the way for honesty and ethical behaviour, which further fosters trust and strengthens connections. By embracing these values, individuals lead more authentic lives, positively impacting both themselves and their communities. NCC cadets, in particular, are expected to embody integrity, honesty, discipline, respect, and leadership, contributing to personal growth and becoming responsible & capable citizens



SUMMARY

- Integrity is in relation to the self and Honesty manifests in our dealings with others.
- Integrity is saying and doing 'What is right', irrespective of external circumstances. It is a liberating virtue which keeps one on the correct path without any apprehension or temptation.
- Integrity guides ethical decision-making and upholds moral principles, even under pressure or challenging circumstances.
- Impeccable Integrity leads to unshakeable honesty.
- Honesty involves truthfulness, fairness and transparency in our dealings with others.
- Honesty fosters trust, accountability, and authenticity in interpersonal and professional environments. It enhances reputation and supports personal growth.
- Both honesty and integrity are essential for building trust, reputation, and positive influence.
- NCC cadets are expected to be epitome of integrity & honesty.
- Key expectations include discipline, mutual respect, teamwork, sense of service and adherence to rules.
- Embodying these values leads to personal development and strengthens the society, ensuring cadets become responsible citizens who uphold the dignity of the nation.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the primary aim of the lecture discussed in the introduction?

- (a) To teach leadership skills
- (b) To foster among cadets the importance of honesty and integrity
- (c) To discuss the history of the NCC
- (d) To explain military strategies

Q2. Which of the following is a component of honesty?

- (a) Accountability
- (b) Consistency
- (c) Trust-building
- (d) Respect for self

Q3. What does honesty primarily involve?

- (a) Following the right path
- (b) Being truthful, sincere, and free from deceit
- (c) Valuing oneself
- (d) Taking responsibility for one's actions

Q4. How does honesty contribute to relationships?

- (a) By causing conflicts
- (b) By fostering trust
- (c) By encouraging secrecy
- (d) By creating fear

Q5. Which of the following is not a key component of integrity?

- (a) Courage
- (b) Accountability
- (c) Consistency
- (d) Deception

Q6. What is the difference between honesty and integrity?

- (a) Honesty is based on personal beliefs, while integrity is about external interactions
- (b) Honesty is about self-identity, while integrity is about dealings with others
- (c) Honesty relates to relationships with others, while integrity comes from self-identity
- (d) There is no difference between honesty and integrity



Q7. What role does integrity play in making decisions?

- (a) It serves as a guide for ethical decision-making
- (b) It encourages personal gain in decision-making
- (c) It ensures decisions are based on emotions
- (d) It leads to unethical choices

Q8. According to the text, which is not an expectation of an NCC cadet?

- (a) Punctuality
- (b) Disrespect towards peers
- (c) Participation in training programs
- (d) Maintaining physical fitness

Q9. What is expected of cadets in terms of conduct?

- (a) To use force in resolving conflicts
- (b) To show respect and courtesy towards seniors and peers
- (c) To challenge orders from superiors
- (d) To ignore the rules and guidelines

Q10. Which of the following is an expectation related to the health and fitness of an NCC cadet?

- (a) Maintaining personal hygiene
- (b) Using substances like alcohol
- (c) Regular physical exercise and sports participation
- (d) Ignoring physical fitness

Q11. What should NCC cadets do if they have grievances?

- (a) Ignore the issue
- (b) Report them through the proper channels
- (c) Discuss them publicly
- (d) Keep them to themselves

Q12. How does integrity affect an individual's reputation?

- (a) It leads to negative perceptions
- (b) It enhances personal and professional credibility
- (c) It makes people dislike the individual
- (d) It has no impact on reputation



Q13. What is the most important aspect of integrity?

- (a) Maintaining a strong physical presence
- (b) Acting consistently in accordance with one's ethical beliefs
- (c) Seeking rewards for actions
- (d) Following the crowd

Q14. What is the ultimate test of integrity for an NCC cadet as per the example provided in the text?

- (a) Performing well when being observed
- (b) Working without expecting rewards or recognition
- (c) Ignoring tasks when no one is around
- (d) Competing for leadership roles

Q15. What is expected of NCC cadets regarding substance abuse?

- (a) It is encouraged during camps
- (b) It is allowed if not caught
- (c) It is strictly prohibited
- (d) It is monitored but allowed in moderation

Short answer Questions

- Q1. Define honesty and explain its importance in building trust?
- Q2. List two key components of integrity.
- Q3. Why is a positive reputation important for an individual?
- Q4. What is the role of discipline in the behaviour of an NCC cadet?
- Q5. How does honesty contribute to conflict resolution?

Long Answer Questions

- Q1. Explain the importance of honesty and integrity in personal and professional life, and how they contribute to building strong relationships?
- Q2. Describe the expectations and values that NCC cadets must follow, and how these contribute to their development as responsible citizens?
- Q3. What are the possible consequences for an NCC cadet who fails to adhere to the guidelines of honesty, integrity, and discipline?
- Q4. What is the difference between honesty and integrity? Illustrate with the help of an example other than the one given in the chapter.
- Q5. Why is integrity a higher virtue to pursue in comparison to honesty?

MORAL AND ETHICS (JD/JW)CHAPTER ME III : HONOUR CODETEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture
Year : 2nd Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/Lesson Plan; Computer, OHP, Screen, Board, Markers, Display Charts.

Time Plan

- Introduction : 03 Mins
- Part I : Honour Code : 12 Mins
- Part II : Structure and Functioning of The Committee : 20 Mins
- Conclusion : 05 Mins





INTRODUCTION

1. The honour code system has been introduced with an aim to foster the vital ingredients of a good and strong character amongst NCC cadets. In today's times, where good character is becoming a rare commodity, strong basic foundation of character becomes even more important. The Honour code serves like a Light House, guiding the ships in the treacherous oceans.

AIM

2. To highlight the importance of Honour Code amongst cadets.

PREVIEW

The lecture shall be conducted in following parts:--

- (a) Part I : Honour Code.
- (b) Part II : Structure & Functioning of the Committee.

LEARNING OBJECTIVES

- Promoting Accountability and Responsibility
- Encouraging Ethical Decision Making
- Enhancing Leadership Qualities
- Building Character and Group Cohesion
- Application in Real-World Situations

PART I : HONOUR CODE

3. The honour code consists of the following parts:-

- (a) Honour Code.
- (b) Honour Code Committee.
- (c) Feedback System.

The Honour Code

4. The Commandments of the honour code are:-

- (a) I shall not lie, steal, cheat or tolerate those who do so.
- (b) I shall not do anything selfish or mean including letting down a colleague for self interest.
- (c) I shall not, by any action or omissions bring the name of this organisation into disrepute.
- (d) I shall accept voluntarily my responsibility for any infringement of this code.



PART II : STRUCTURE AND FUNCTIONING OF THE COMMITTEE

5. The proposed composition of Honour Code Committee is as under:-

- (a) **Chairperson.** Senior most cadet
- (b) **Members.**
 - (i) One second year cadet per troop.
 - (ii) One first year cadet per troop.
- (c) ANO/ CTO as officer guide.

6. **Composition.** As a rule, all members are required to attend every meeting. If the Chairman is absent, the officer guide shall nominate a Chairman from amongst the members. The quorum will not be complete without the officer guide. All second and first year cadets will be encouraged to attend as observers.



7. No Cadets previously guilty of an offence involving character can be part of the committee. The members are elected from the entire troop. The chairman is appointed.

8. **Duties of the Committee.**

- (a) The Honour Code Committee shall be the trustee of the Honour Code and will take every action to propagate, implement and enrich it.
- (b) They shall hold a formal meeting on the last Saturday of the month or as required.
- (c) All honour cases will be discussed by them. They will refer such discussions to the battalion commander. An offender will not be called an accused and the discussion not a trial.
- (d) Their meeting will commence at a time and place appointed by the Chairman.
- (e) During these meetings, they shall review the Honour Code scene in their troop and formulate a remedial strategy.
- (f) They shall discuss and formulate any notice or other material for publication to all.
- (g) They shall investigate and judge all Honour Code cases referred to them by the ANO/ Battalion Commander or those cases involving breach of the code brought to their notice by the cadets.



9. **Duties of Officer Guide.**

- (a) He/ She will attend all meetings and resolve any procedural difficulties on the spot.
- (b) He/ She will arrange for all witnesses for discussion in a case, but will neither question nor brief them,
- (c) He/ She will only guide the committee in its functioning and moderate verdicts given by the committee.
- (d) He/ She shall carefully listen to the evidence produced at the meeting and ensure that the defaulter cadets are able to defend themselves.

10. **Powers Of Honour Code Committee.** The powers and duties of the committee are neither disciplinary, nor does the committee have the authority to punish. Its functions are instructional and advisory. The committee acts as a panel reporting facts of violation to the ANO/ Battalion Commander.

11. **System of Voting.** Voting will be by a secret, written ballot. A simple majority will bring out the facts of violation. If due to the absence of the Chairman or any other members, an even member of persons will form the committee and the officiating Chairman shall not vote.

12. **Procedure for Processing Honour Code Cases.**

- (a) ANO/ Battalion Commander will scrutinize all offence reports and will filter to the committee only those cases which are Honour Code violations.
- (b) The committee will warn the defaulters and give them a minimum of 48 hours to either prepare defence or make a confession.
- (c) After 48 hours' notice, if the confession has not been made, committee will assemble under the directions of the Chairman and proceed to discuss the case.
- (d) The defaulters will be present throughout the hearing of the witnesses and may put questions to them, if they so desire. After all the evidence has been recorded, the defaulter will be asked to leave the room while the case is considered. On approval the defaulter shall be informed of the recommendations being made. The committee will write their report and hand it

DID YOU KNOW?

In 1956, when Shri Lal Bahadur Shastri was the Railway Minister:-

- There was a train accident in Ariyalur, Tamil Nadu.
- He resigned from his post on grounds of moral responsibility.
- Even Mr Nehru, the then Prime Minister could not make him stay.
- His resignation was a rare act and is still quoted as an example of political accountability and following a personal honour Code.



over to the officer guide for handing over to the Battalion Commander.

(e) The Battalion Commander will take further actions himself, or if the situation warrants, endorse remarks on the report & forward it to the school authorities.

13. **Appeals.** No appeal can be made by a defaulter against recommendation made by the committee.

14. **Hearing and Subsequent Official Action.** These hearings are before the Battalion Commander and superior officers and shall be governed by the normal customs of military service and law so as to ensure justice for the defaulter. Whenever the recommendations of the Honour Code Committee are not accepted by the authorities, they shall state their reasons for not doing so.

15. **Mitigatory Feature.** If any cadet voluntarily owns up for an Honour Code violation prior to discovery of the offence by another person, their action will be considered as mitigatory feature.

16. **Aggravating Feature.** If anyone commits an Honour Code violation and is discovered by a colleague, but not by the authorities, the offender will be advised by the discovering colleague to report to the ANO within 48 hours. Failure of the defaulter to the report will be considered an aggravation of the original offence if the guilt is established. If the offender reports within 48 hours, the case will be considered on merits, neither mitigated nor aggravated.

17. **Feedback System.** An honour code register will be opened by each battalion and minutes of each meeting will be recorded. The officer guide will endorse his/ her remarks. The comments of the Battalion Commander will also be endorsed.

18. The register will be forwarded to the Group Commander once a month or immediately after discussion of a case where a cadet has violated the commandments of the honour code.

19. A battalion honour code meeting should be held once every quarter. The chairman of this committee will be the senior most cadet and officer guide is the adjutant.

20. Feedback will be sought by the battalion Commander from the committee after a routine meeting and after every Honour Code discussion. The feedback should include the following :

- (a) Work load of the committee.
- (b) Nature of cases dealt within the previous month.
- (c) Reports/publicity material published during the previous month.
- (d) Difficulties experienced.



(e) Recommendations.

21. After every Honour Code discussion, the defaulters will be asked by the Battalion Commander to give a feed-back on the following points :-

- (a) Were they given adequate notice to prepare the defence?
- (b) Were they given the opportunity to defend their cases during the discussion?
- (c) Was the discussion fair?

22. **Feedback.** Feedback information from all these sources will be studied by the Battalion Commander and forwarded to the Group Commander along with recommendations for their direction/decision:-

- (a) **Informal Feedback.** The battalion commander and the Group Commander may obtain informal feedback on the Honour Code System from any ANO or cadet and take notice of the same for further action/ proceedings.
- (b) **Passing out Course Feedback.** Feedback should be obtained from passing out cadets on the following :-
 - (i) Contribution of the system to character building.
 - (ii) Its good/ bad points.
 - (iii) Recommendation/ Suggestions.

HIGHER ORDER THINKING SKILLS (HOTS)

- How will you promote the Honour Code among first-year cadets who may not fully understand its significance?

CONCLUSION

23. The honour code is the foundation for cadets' ethical behaviour for the rest of their life. It is hoped that this basic foundation erected for cadets will help build up better character qualities in the cadets in the years to come. You will learn the art of leadership and man - management here in the NCC. No amount of lists and "Do's/Don'ts" can be a substitute for experience, Always remember, "Honour before self".



SUMMARY

- The Honour Code System instils character traits like honesty, integrity, and responsibility in cadets, providing ethical principles for behaviour within the NCC and in life. It rejects lying, stealing, cheating, and disrespectful behaviour that harms the NCC's reputation.
- The committee is made up of senior and junior cadets under the guidance of an officer and ensures adherence to the Honour Code through investigations and recommendations, without imposing punishments.
- The Honour Code Committee meets regularly to handle violations, allowing offenders to present their defence. Cadets and officers provide feedback to improve the system, which emphasizes personal responsibility, fairness, and integrity.



ASSESSMENT EXERCISE

Multiple Choice Questions

- Q1. What is the primary purpose of the Honour Code System?**
- (a) To improve physical fitness
 - (b) To foster good character traits like honesty, integrity, and responsibility
 - (c) To promote leadership skills
 - (d) To enhance academic performance
- Q2. Which of the following is a commandment of the Honour Code?**
- (a) Lie to protect yourself
 - (b) Tolerate unethical behaviour
 - (c) Do not steal, cheat, or lie
 - (d) Promote selfish interests
- Q3. Who is the Chairman of the Honour Code Committee?**
- (a) The ANO
 - (b) The senior-most cadet
 - (c) A teacher from the school
 - (d) The Battalion Commander
- Q4. What is the composition of the Honour Code Committee?**
- (a) Only senior cadets
 - (b) Cadets from different year groups and an officer guide
 - (c) Only first-year cadets
 - (d) Only the Battalion Commander
- Q5. What happens if the Chairman is absent during a meeting?**
- (a) The meeting is cancelled
 - (b) The officer guide nominates a new Chairman from the members
 - (c) The meeting continues without a Chairman
 - (d) The second year cadet becomes the Chairman
- Q6. Who can attend Honour Code Committee meetings as observers?**
- (a) Only senior cadets
 - (b) Only cadets involved in the case
 - (c) All second and first-year cadets
 - (d) No one can attend as an observer



Q7. What is the main role of the Honour Code Committee?

- (a) To punish offenders
- (b) To propagate, implement, and enrich the Honour Code
- (c) To conduct physical training
- (d) To enforce military strategies

Q8. What is the procedure for processing Honour Code violations?

- (a) Cadets are immediately expelled
- (b) Offenders are given 48 hours to prepare their defence or confess
- (c) No action is taken until the offenders report the violation themselves
- (d) Violations are handled outside of the Honour Code Committee

Q9. What happens if a defaulter does not report a violation within 48 hours?

- (a) No action is taken
- (b) The case is closed
- (c) The violation is considered aggravated
- (d) The defaulter is immediately expelled

Q10. Who is responsible for moderating verdicts given by the Honour Code Committee?

- (a) The Battalion Commander
- (b) The Officer Guide
- (c) The senior-most cadet
- (d) The committee members themselves

Q11. What is the role of the Battalion Commander in the Honour Code process?

- (a) To investigate Honour Code violations
- (b) To appoint the committee members
- (c) To review and take further action after the committee's report
- (d) To supervise cadets' fitness training

Q12. What feature can be considered mitigatory in an Honour Code violation case?

- (a) Reporting a violation after 72 hours
- (b) Voluntarily owning up to the violation before discovery
- (c) Having a good academic record
- (d) Showing disrespect for the Honour Code Committee



Q13. What happens when the Honour Code Committee makes a recommendation?

- (a) The Battalion Commander can choose to ignore the recommendation
- (b) The committee enforces the recommendation
- (c) The defaulter is immediately punished
- (d) The committee has the authority to impose penalties

Q14. What is the main function of the Feedback System in the Honour Code?

- (a) To collect cadets' academic performance reports
- (b) To document the Honour Code cases and discussions
- (c) To evaluate physical training results
- (d) To enforce punishments

Q15. Which of the following is a key tenet of the Honour Code?

- (a) Prioritize personal interests over group interests
- (b) Ignore breaches of conduct if they are not reported
- (c) Stand up for what is right and accept responsibility for any infraction
- (d) Only follow the rules when being observed.

Short Answer Questions

- Q1. What are the four main commandments of the Honour Code?
- Q2. What is the composition of the Honour Code Committee?
- Q3. What is the role of the Honour Code Committee?
- Q4. What is the procedure for handling Honour Code violations?
- Q5. What is meant by 'feedback' in the context of the Honour Code system?

Long Answer Questions

- Q1. Explain the structure and functioning of the Honour Code Committee.
- Q2. Discuss the main tenets of the Honour Code and their importance in building character among cadets.
- Q3. Describe the process and significance of the Honour Code's feedback system.
- Q4. What are the mitigating and aggravating features in the Honour Code system, and how do they affect the outcome of a case?
- Q5. What is the role of the Officer Guide in the Honour Code system? Discuss their duties during the committee's proceedings.

PERSONALITY
DEVELOPMENT
&
LEADERSHIP

2

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PERSONALITY DEVELOPMENT & LEADERSHIP (JD/JW)

CHAPTER PDLS I : LEADERSHIP TRAITS

"Be the change that you wish to see in the world."

Mahatma Gandhi



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture and Practice
Year	:	1st Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/ Lesson plan; Board/ OHP with Screen; Presentation; Posters/Infographics of Important Leaders; Leadership Case Studies, Hands-on Activities to Create Time-blocked Schedules, Reflection Exercises on Time Management.

Time Plan

• Introduction	:	05 Mins
• Part I	:	04 Mins
• Part II	:	06 Mins
• Part III	:	10 Mins
• Part IV	:	10 Mins
• Conclusion	:	05 Mins





INTRODUCTION

1. Personality development and leadership are intertwined, with strong character traits being the foundation of effective leadership. By cultivating qualities like empathy, integrity, and resilience, individuals can enhance their leadership potential. Personality development involves recognising and refining personal strengths and weaknesses, while leadership focuses on inspiring and guiding others. Together, they empower individuals to become confident, compassionate, and influential leaders who can positively impact their communities and organisations. Leadership traits are the distinguishing qualities that set effective leaders apart. These traits encompass a wide range of attributes, from strong communication and problem-solving skills to empathy, integrity, and resilience. By developing these traits, individuals can enhance their leadership abilities and inspire others to achieve their full potential. Whether it is leading a team, a project, or an organisation, these essential qualities are the cornerstone of successful leadership.

INTERESTING FACTS

- Leaders are Made, Not Born
- Effective Leaders are Active Listeners
- Resilience is a Leadership Superpower
- Humility is a Hidden Strength
- Great Leaders Inspire Others
- Sense of Humour is a Valuable Leadership Quality



PREVIEW

The lecture comprises the following parts:-

- (a) Part I : Leadership
- (b) Part II : Essential Types & Traits of Leadership
- (c) Part III : Understanding Character Traits
- (d) Part IV : Inculcating Leadership Qualities

LEARNING OBJECTIVES

- Identify and explain leadership qualities
- Analyse different leadership types and traits
- Understand the importance of character in leadership
- Apply leadership traits to personal and professional life

PART I : LEADERSHIP

2. Leadership is the ability to guide and influence others. It is not just about having a title or position; anyone can be a leader. Leadership is a skill that can be learnt and improved:-

- (a) **Influence.** Leadership involves motivating and inspiring others to act.
- (b) **Direction.** Leaders provide a clear vision and roadmap for success.
- (c) **Impact.** The measure of leadership is often the change or progress it brings.

3. What makes a good leader? It is a question that has been pondered upon for centuries. While there is no single formula, effective leaders possess a unique blend of qualities that inspire and motivate others. From strong communication skills and unwavering integrity to a vision that inspires and a relentless drive to achieve, these traits define the essence of great leadership:-

- (a) **Lead by Example.** Show the behaviours and values you expect from your team.
- (b) **Integrity & Self-Discipline.** Be honest, ethical, and accountable.
- (c) **Empower Your Team.** Create a positive, inclusive work environment.
- (d) **Fairness.** Treat everyone with respect and equality.
- (e) **Team-Focused.** Prioritise team success over personal goals.
- (f) **Dedication.** Put the team's needs first.
- (g) **Resourceful.** Be creative and adaptable in problem-solving.
- (h) **Earn Respect.** Gain trust through actions, not demands.

DID YOU KNOW?

- Netaji Subhash Chandra Bose's inspiring slogan "Give me Blood and I shall Give you Freedom", along with Mahatma Gandhi's philosophy of nonviolent resistance (Satyagraha), had a profound impact on the Indian independence movement.
- India has had a rich history of women leaders, from Rani Lakshmibai to Indira Gandhi. These women have played pivotal roles in shaping the nation's history.



Empathy vs Sympathy

<ul style="list-style-type: none"> ➤ Active ➤ Understanding someone's feelings as if they were yours ➤ Choosing to feel someone else's pain or joy with them at a deeper emotional level 	<ul style="list-style-type: none"> ➤ Passive ➤ Feeling sorry for someone from your own point of view ➤ <u>Recognising</u> someone else's pain or joy but with emotional boundaries
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- (j) **Reliability**. Keep your commitments.
- (k) **Communication**. Be open, transparent, and seek feedback.
- (l) **Accountability**. Manage resources responsibly.
- (m) **Continuous Growth**. Improve your skills and stay updated.
- (n) **Empathy**. Show genuine care for team members.
- (o) **Resilience**. Stay positive and overcome challenges.

PART II : ESSENTIAL TYPES & TRAITS OF LEADERSHIP

4. Great military leaders aren't perfect, but they balance their strengths and weaknesses. A good leader knows their strengths and works on improving their weaknesses.

5. **Leadership Styles**. Understanding various leadership styles is crucial for effective leadership. By understanding these different styles, leaders can adapt their approach to suit specific situations and team dynamics. A successful leader often combines multiple styles to achieve optimal results:-

- (a) **Autocratic Leadership**. In this style, leaders make decisions unilaterally, with little to no input from team members. It is effective in situations requiring quick decisions or strict compliance, but it may hinder creativity and team morale in the long term.
- (b) **Democratic Leadership**. Also known as participative leadership, this style involves team members in the decision-making process. Leaders value input and encourage collaboration, which fosters innovation, ownership, and team satisfaction.
- (c) **Laissez-Faire**. A laissez-faire leader is a leader in name only. They do not actively participate in group decisions or behaviours. The members have complete freedom. While this approach works well with competent members who are self-motivated and can work without much guidance, with other types it may fail.

6. **Leadership Traits**. Effective leaders possess a unique blend of qualities that inspire and motivate, such as strong communication skills, empathy, integrity, and a vision for the future. These traits enable leaders to build strong teams, overcome challenges, and achieve remarkable results. A leader must possess a combination of traits to be effective:-

- (a) **Alertness**. Leaders must stay aware of their surroundings and make quick decisions when opportunities arise.
- (b) **Bearing**. How a leader looks and acts influences their authority. Confidence and professionalism matter.



- (c) **Courage**. Leaders need courage to face challenges and make tough decisions, even when scared, like speaking in class despite being nervous.
- (d) **Decisiveness**. Leaders make quick, clear decisions, even under pressure. For example, a team leader choosing a game strategy.
- (e) **Dependability**. Being reliable and consistent builds trust. A dependable leader always follows through.
- (f) **Confidence**. Confidence is one of the most critical traits of effective leadership. It inspires trust, motivates teams, and enables leaders to navigate challenges with poise.
- (g) **Enthusiasm**. A leader's passion can motivate others, like a student excited to learn and participate.
- (h) **Initiative**. Leaders take action without waiting for instructions. They make bold moves when needed.
- (j) **Justice**. Treating people fairly and kindly is essential, like helping a bullied classmate.
- (k) **Knowledge**. Leaders must keep learning and know more than those they lead, mastering their role and team.
- (l) **Loyalty**. Leaders stay loyal to their team and take responsibility for their mistakes.
- (m) **Sense of Humour**. A good sense of humour helps relieve stress and boosts morale in tough times.

HIGHER ORDER THINKING SKILLS (HOTS)

- **Imagine you are leading a team in a match, on the brink of defeat. How would you motivate your team members during such a challenging time?**

PART III : UNDERSTANDING CHARACTER TRAITS

7. Character is the foundation of leadership. It is the combination of qualities that define a person's moral and ethical principles. A strong character is essential for building trust, respect, and credibility. Key character traits for a leader include:-

- (a) **Honesty and Truthfulness**. Leaders must be transparent and sincere in all their dealings.
- (b) **Keeping Promises**. A leader's word is their bond. Following through on commitments builds trust and reliability.



- (c) **Accountability.** Taking responsibility for one's actions, both successes and failures, is essential
- (d) **Self-Reflection.** Regularly evaluating personal strengths and weaknesses fosters continuous improvement.
- (e) **Resisting Temptation.** Ethical leaders must resist temptations that could compromise their integrity.
- (f) **Setting an Example.** Leading by example is the most powerful way to inspire and motivate others.
- (g) **Responsibility.** A leader must be accountable for their actions and decisions, especially those that impact others.
- (h) **Self-Sacrifice.** Putting the needs of the team or organisation above personal interests demonstrates selfless leadership.
- (j) **Impartiality.** Fair and unbiased treatment of all individuals is crucial for building strong relationships.
- (k) **Self-Discipline.** Maintaining focus, controlling impulses, and staying committed to goals are essential for effective leadership.

PART IV : INCULCATING LEADERSHIP QUALITIES

8. Cultivating leadership skills in today's youth is essential, as they are the future leaders who will shape our world. The focus should be on empowering young individuals by equipping them with key leadership qualities such as communication, problem-solving, adaptability, and empathy. These skills enable them to navigate challenges, inspire others, and contribute positively to society:-

- (a) **Self-awareness.** Recognising one's strengths and weaknesses allows individuals to lead authentically. For example, a student skilled in public speaking may use this talent to motivate peers.
- (b) **Communication.** Effective leaders communicate clearly and listen actively. Activities like debate clubs help students develop these crucial skills.
- (c) **Problem-solving.** Leaders must find innovative solutions. Encouraging critical thinking and problem-solving competitions enhances students' creativity and teamwork.
- (d) **Promote Teamwork and Collaboration.** Effective leadership hinges on fostering strong teamwork and collaboration. By encouraging open communication, building trust, and empowering team members, leaders can create a positive and productive work environment. Clear goal setting, conflict resolution, and leading by example are crucial for inspiring and motivating teams to achieve shared objectives.
- (e) **Mentorship.** Pairing students with experienced mentors fosters personal growth, providing valuable guidance for their leadership journeys.



CONCLUSION

9. Effective leadership encompasses the ability to inspire and motivate others, set clear goals, and drive positive change through impactful actions. It requires leading by example with integrity, empowering teams, and demonstrating adaptability, empathy, and resilience. Strong leaders exhibit traits such as alertness, courage, decisiveness, and enthusiasm while building trust through honesty, accountability, and fairness. Continuous learning, self-discipline, and ethical behaviour form the backbone of leadership character. To cultivate future leaders, it is vital to nurture skills in communication, problem-solving, and empathy while providing opportunities for mentorship and hands-on experiences like debates and community service, fostering a foundation for responsible and effective leadership.

SUMMARY

- Leadership involves guiding and influencing others, focusing on motivation and direction, and driving positive change, beyond just holding a position.
- Effective leaders exhibit courage, dependability, initiative, judgement, resilience, and loyalty, balancing strengths and improving weaknesses.
- Honesty, accountability, self-discipline, fairness, and responsibility build trust and credibility, forming the moral core of leadership.
- Great leaders lead by example, communicate effectively, empower teams, prioritise collective success, and adapt creatively to challenges.
- Equipping young individuals with self-awareness, empathy, problem-solving, adaptability, and mentorship prepares them to navigate challenges and inspire change.
- Leaders grow by learning from experiences, staying resourceful, and fostering inclusivity and integrity in their actions.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is leadership?

- (a) Holding a title or position
- (b) The ability to guide and influence others
- (c) Giving orders
- (d) Focusing only on personal goals

Q2. What does leadership require to be effective?

- (a) A strong title
- (b) Knowledge of everything
- (c) Learning and improvement
- (d) A lack of communication

Q3. Which of the following is a key aspect of leadership?

- (a) Influence
- (b) Authority
- (c) Strict discipline
- (d) Control

Q4. What is the measure of leadership?

- (a) The number of followers
- (b) The change or progress it brings
- (c) The title held
- (d) Personal achievements

Q5. What should leaders lead by?

- (a) Force
- (b) Rewards
- (c) Fear
- (d) Example

Q6. What is the key quality for earning respect as a leader?

- (a) Demanding it
- (b) Gaining trust through actions
- (c) Offering rewards



(d) Giving orders

Q7. What does 'self-discipline' in leadership refer to?

- (a) Controlling others
- (b) Controlling impulses and staying focused on goals
- (c) Ignoring personal goals
- (d) Following others' instructions

Q8. Which trait involves being honest, ethical, and accountable?

- (a) Integrity & Self-discipline
- (b) Team-focused
- (c) Resourcefulness
- (d) Resilience

Q9. How should leaders handle decisions under pressure?

- (a) By avoiding them
- (b) By making quick, clear decision
- (c) By delegating them to others
- (d) By delaying them

Q10. What does a leader need to be to inspire others in tough situations?

- (a) Dependable
- (b) Enthusiastic
- (c) Critical
- (d) Aggressive

Q11. Which of these traits helps leaders stay loyal and responsible to their teams?

- (a) Courage
- (b) Loyalty
- (c) Initiative
- (d) Humour

Q12. Which trait helps a leader manage resources responsibly?

- (a) Self-reflection
- (b) Empathy
- (c) Financial Accountability
- (d) Team-focused



Q13. What is the foundation of leadership?

- (a) Strength
- (b) Character
- (c) Knowledge
- (d) Authority

Q14. What trait involves leading by positive actions and behaviours?

- (a) Accountability
- (b) Setting an example
- (c) Impartiality
- (d) Self-sacrifice

Q15. Which skill is crucial for leaders to engage with challenges and inspire others?

- (a) Empathy
- (b) Humour
- (c) Teamwork
- (d) Communication

Q16. How can leaders help others grow and improve?

- (a) By being strict
- (b) By providing mentorship
- (c) By avoiding conflict
- (d) By focusing only on their goals

Q17. Which trait helps leaders understand and connect with others emotionally?

- (a) Empathy
- (b) Courage
- (c) Judgement
- (d) Resilience

Q18. What quality allows leaders to navigate challenges in a changing world?

- (a) Judgement
- (b) Adaptability
- (c) Loyalty
- (d) Dependability



Q19. Which skill is developed through activities like debate clubs?

- (a) Self-awareness
- (b) Endurance
- (c) Problem-solving
- (d) Communication

Q20. Why is self-awareness important for leaders?

- (a) It helps them know their strengths and weaknesses.
- (b) It helps them follow orders.
- (c) It improves their physical strength.
- (d) It makes them more popular.

Short Answer Questions

- Q 1. What is leadership, and can it be learnt?
- Q 2. Why is leading by example important for effective leadership?
- Q 3. What is the role of integrity in leadership?
- Q 4. How does embracing and empowering a team contribute to effective leadership?
- Q 5. Why is continuous learning crucial for a leader?

Long Answer Questions

- Q 1. Discuss the importance of honesty, transparency, and keeping promises in building leadership credibility. Provide examples of how these traits contribute to effective leadership.
- Q 2. Explain the significance of self-discipline and resilience in leadership. How do these traits help leaders in overcoming challenges?
- Q 3. How does empathy and understanding improve a leader's relationship with their team, and why are these traits essential for a positive work environment?
- Q 4. Describe the combination of traits like decisiveness, endurance, and initiative that define an effective leader. How do these traits manifest in real-life leadership situations?
- Q 5. Evaluate the role of judgement and justice in leadership. Why is it important for leaders to be impartial and consistent when making decisions?



PERSONALITY DEVELOPMENT & LEADERSHIP (JD/JW)

CHAPTER PDLS II : DESIRABLE HABITS FOR AN EFFECTIVE PERSONALITY

"Personality is not about being perfect; it's about being yourself."

Former President Dr. APJ Abdul Kalam



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture and Practice
Year	:	2nd Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	OHP, Board and Chalk/Markers Concerns.

Time Plan

• Introduction	:	05 Mins
• Part I	:	04 Mins
• Part II	:	08 Mins
• Part III	:	08 Mins
• Part IV	:	10 Mins
• Conclusion	:	05 Mins



INTRODUCTION

1. Personality is a unique blend of traits and behaviours of individuals that shape their interactions with the world. By cultivating desirable habits, individuals can refine this mosaic and become the best versions of themselves. This chapter delves into the power of positive habits, such as time management, effective communication, and having a growth mindset. Time management empowers individuals to prioritise tasks, allocate time efficiently, and reduce stress. Effective communication skills enable clear expression of thoughts and ideas, fostering stronger relationships and understanding. A growth mind-set cultivates belief in continuous learning and improvement, encouraging individuals to embrace challenges and setbacks as opportunities for growth. This chapter explores practical strategies to cultivate desirable habits, empowering one to embark on a journey of personal growth.



Field Marshal Sam Manekshaw

LEARNING OBJECTIVES

- Identify desirable habits for an effective personality
- Understand the development of individual personality
- Analyse factors influencing personality
- Appreciate the diversity of personalities and their impact on behaviour

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Desirable Habits for an Effective Personality
- (b) Part II : Understand the Personality of an Individual and its Development
- (c) Part III : Analyse Different Factors that Influence Personality
- (d) Part IV : Value Individual Differences and their Impact on Behaviour

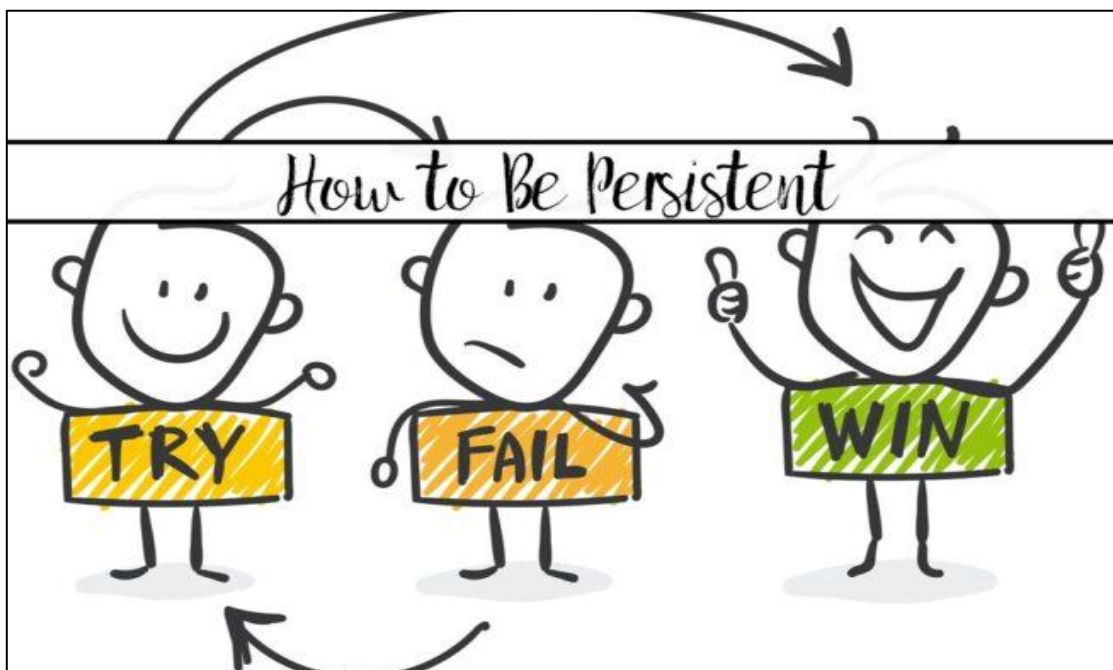
INTERESTING FACTS

- **21-Day Rule.** It is believed that forming a new habit takes approximately 21 days.
- **Power of Habit Loops.** Habits often follow a pattern of cue, routine, and reward. Understanding this pattern can help you break bad habits and form new ones.
- Consistency is the key to forming and maintaining new habits.
- Self-discipline is essential for overcoming challenges and sticking to habits.

PART I : DESIRABLE HABITS FOR AN EFFECTIVE PERSONALITY

2. A well-developed personality is a cornerstone of success and fulfilment in life. It is shaped by a combination of innate traits and acquired habits. Cultivating positive habits can significantly enhance your personality and improve your interactions with others:-

- (a) **Positive Thinking.** Cultivate a positive mindset and avoid dwelling on negativity.
- (b) **Continuous Learning.** Stay curious and seek out new knowledge and experiences.
- (c) **Effective Communication.** Practice clear and concise communication, both verbal and written.
- (d) **Problem-Solving.** Develop problem-solving skills to navigate challenges effectively.
- (e) **Resilience.** Build resilience to bounce back from setbacks and challenges.
- (f) **Self-Care.** Prioritise your physical and mental health through regular exercise, healthy eating, and sufficient sleep.
- (g) **Networking.** Build strong relationships with others to expand your opportunities and support network.
- (h) **Gratitude.** Practice gratitude for the positive aspects of your life.
- (j) **Perseverance.** Stay persistent and determined in pursuing your goals.



PART II : UNDERSTAND PERSONALITY OF AN INDIVIDUAL AND ITS DEVELOPMENT

3. **Personality.** It refers to the unique set of characteristics, traits, and behaviours that define how a person interacts with the world and others. It encompasses a wide range of emotional, mental, and social tendencies that shape one's actions and attitudes. Understanding the development of personality is crucial for recognising how people adapt to their environment and how their identities are formed over time.

4. Components of Personality.

(a) **Traits.** Traits are lasting patterns of thoughts, feelings, and behaviours. Common personality traits include introversion/extroversion, conscientiousness, openness, agreeableness, and emotional stability. These traits usually stay consistent over time and shape a person's personality.

(b) **Behavioural Patterns.** Personality is also shaped by behavioural patterns formed through learnt experiences. How an individual responds to different situations can reflect their coping mechanisms, conflict resolution skills, and decision-making processes.

(c) **Temperament.** Temperament is the natural part of a person's personality, present from early childhood. It includes things like activity level, adaptability, and mood. Temperament affects how a person reacts to their environment and interacts with others.



PART III : FACTORS INFLUENCING AND SHAPING PERSONALITY

5. Personality development occurs over a lifetime, beginning in early childhood and continuing through adulthood. This process is influenced by several factors.

(a) **Biological Factors.** Genetics play a significant role in personality development. While we inherit certain predispositions, our interaction with the environment determines how these traits manifest. For instance, a naturally introverted child might develop social skills differently depending on their upbringing and environment.

DID YOU KNOW?

- Culture shapes much of who we are, from our values to our communication styles.
- Socialization begins at birth and continues throughout life.
- Significant life events, whether positive or negative, play a major role in shaping personality



- (b) **Environmental Factors.** The environment in which a person grows up shapes their personality significantly. Family dynamics, parenting styles, and early social experiences play a foundational role in forming personality traits. For example, children raised in supportive environments tend to develop confidence and resilience, while those exposed to stressful situations may develop anxiety or self-doubt.
- (c) **Cultural Influences.** Culture shapes an individual's values, beliefs, and social behaviours, influencing their personality development. It dictates societal norms, gender roles, and acceptable behaviours within a community. Different cultures promote different personality traits.
- (d) **Socialisation.** Socialization is the process of learning societal norms, values, and behaviours. Interaction with peers, teachers, and other social groups during adolescence helps shape personality traits like empathy, cooperation, and assertiveness.
- (e) **Life Experiences.** Personality is also shaped by significant life events. Positive experiences such as success in school or work, friendships, or overcoming adversity can enhance traits like confidence, resilience, and optimism. Conversely, negative experiences like failure, trauma, or loss can influence emotional responses and behaviour.

PART IV : VALUE INDIVIDUAL DIFFERENCES AND THEIR IMPACT ON BEHAVIOUR

6. Personality diversity refers to the variety of unique traits and behaviours people exhibit, shaped by genetics, environment, and experiences. Understanding this helps explain how individuals interact, make decisions, and solve problems.

- (a) **Unique Nature of Personality.** Each person's personality is shaped by a combination of experiences, genes, and learnt behaviours.
- (b) **Influence on Behaviour.** Personality affects decision-making, communication styles, and emotional reactions. For example, extroverts communicate openly, while introverts may prefer listening.
- (c) **Problem-Solving & Creativity.** Different personalities offer unique approaches to problems, with some people being more creative, while others focus on practical solutions.
- (d) **Relationships & Social Interactions.** In work and personal settings, appreciating personality diversity fosters better teamwork, stronger relationships, and more effective conflict resolution.



(e) **Challenges & Opportunities.** While personality differences can lead to misunderstandings, they also provide opportunities for growth, stronger teams, and improved communication.

HIGHER ORDER THINKING SKILLS (HOTS)

- **What do you think leads to better outcomes- diversity or homogeneity in a team's composition, and why?**

CONCLUSION

7. Incorporating positive thinking, effective time management, and clear goal setting lays the foundation for personal growth and success. Cultivating self-discipline and resilience equips individuals to overcome challenges, while continuous learning and adaptability ensure ongoing development in a dynamic world. Effective communication and empathy strengthen relationships and foster understanding, creating harmony in interactions. Finally, prioritising self-care is essential for maintaining physical and mental well-being, enabling sustained productivity and fulfilment. Together, these principles form a comprehensive framework for leading a balanced, successful, and meaningful life.

SUMMARY

- Personality is shaped by innate traits, learnt behaviours, and life experiences, influencing how individuals interact with others and the world.
- Positive thinking, self-discipline, empathy, adaptability, resilience, and effective communication are essential for personal and professional success.
- Genetics, upbringing, cultural influences, socialization, and life experiences significantly shape personality traits over time.
- Traits (e.g., introversion/extroversion), temperament, and behavioural patterns define unique characteristics and responses to the environment.
- Regular self-reflection, goal setting, continuous learning, time management, and self-care improve personality and interpersonal skills.
- Understanding and valuing different personalities fosters better relationships, teamwork, and creative problem-solving while mitigating misunderstandings.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the cornerstone of success and fulfilment in life?

- (a) Talent
- (b) Luck
- (c) A well-developed personality
- (d) Financial stability

Q2. Which of the following habits can significantly enhance your personality?

- (a) Negative thinking
- (b) Avoiding responsibility
- (c) Cultivating positive habits
- (d) Procrastination

Q3. What is the primary goal of goal setting?

- (a) To get rich
- (b) To stay motivated and focused
- (c) To avoid hard work
- (d) To please others

Q4. What does self-discipline help with?

- (a) Resisting temptations that hinder progress
- (b) Avoiding work
- (c) Ignoring others' opinions
- (d) Pursuing personal goals without limits

Q5. Which of the following is an example of effective communication?

- (a) Ignoring feedback
- (b) Speaking without thinking
- (c) Clear and concise communication
- (d) Monopolizing conversations

Q6. What is the role of empathy in personality development?

- (a) Understanding and considering the perspectives of others
- (b) Competing with others
- (c) Ignoring emotions
- (d) Avoiding emotional connections

Q7. Which trait is essential for facing challenges effectively?

- (a) Timidity
- (b) Problem-solving skills
- (c) Laziness
- (d) Avoiding confrontation

Q8. What does adaptability refer to in personality development?

- (a) Sticking rigidly to old methods



- (b) Being open to change and new situations
- (c) Rejecting new ideas
- (d) Refusing to listen to others

Q9. Which of the following is a component of personality?

- (a) Hobbies
- (b) Traits
- (c) Appearance
- (d) Favourite foods

Q10. What is temperament in the context of personality development?

- (a) The environmental influence on personality
- (b) The natural part of personality, including activity level and mood
- (c) Learnt behaviours
- (d) Career choices

Q11. How are personality traits typically developed?

- (a) Through inherited genes only
- (b) By chance
- (c) Through learnt experiences and interaction with the environment
- (d) By social media influence

Q12. Which of the following factors influence personality development?

- (a) Only genetics
- (b) Only environmental factors
- (c) Genetics, environment, and life experiences
- (d) None of the above

Q13. What is the role of culture in personality development?

- (a) It has no effect on personality.
- (b) It shapes values, beliefs, and social behaviours.
- (c) It only affects appearance.
- (d) It makes personality static.

Q14. Which of the following is an example of socialization?

- (a) Learning societal norms and values through interaction
- (b) Isolating oneself from others
- (c) Rejecting new cultural ideas
- (d) Keeping to personal beliefs without influence



Q15. Which life experience can enhance personality traits like confidence and resilience?

- (a) Failure and trauma
- (b) Success in school or work and overcoming adversity
- (c) Avoiding challenges
- (d) Ignoring personal growth

Q16. What is personality diversity?

- (a) Having identical traits
- (b) Having a fixed personality
- (c) The variety of unique traits and behaviours people exhibit
- (d) Limiting oneself to one way of thinking

Q17. How does personality affect problem-solving and creativity?

- (a) It does not affect problem-solving.
- (b) Different personalities offer unique approaches to problems, with some being more creative.
- (c) Only extroverts can solve problems creatively.
- (d) Personality has no impact on creativity.

Q18. What impact does appreciating personality diversity have on relationships and teamwork?

- (a) It leads to confusion.
- (b) It fosters better teamwork, stronger relationships, and more effective conflict resolution.
- (c) It creates more conflicts.
- (d) It isolates people.

Q19. What can personality differences lead to?

- (a) Misunderstandings
- (b) Limited creativity
- (c) Increased stress
- (d) Growth, stronger teams, and improved communication

Q20. What does regular self-reflection help with in personality development?

- (a) Ignoring areas for improvement
- (b) Regularly assessing progress and identifying areas for improvement
- (c) Avoiding criticism
- (d) Stagnating growth



Short Answer Questions

- Q1. Explain the importance of positive thinking for an effective personality.
- Q2. How can effective time management help you achieve your goals?
- Q3. What is the role of self-discipline in developing a strong personality?
- Q4. Why is continuous learning essential for personal growth?
- Q5. How can empathy help you build strong relationships with others?

Long Answer Questions

- Q1. Discuss the relationship between self-care and personality development.
- Q2. Analyse the impact of positive thinking on overall well-being and success.
- Q3. Explain the role of effective communication in building strong relationships and achieving goals.
- Q4. Discuss the challenges of developing and maintaining good habits.
- Q5. Evaluate the importance of perseverance in overcoming obstacles and achieving success.

PERSONALITY DEVELOPMENT & LEADERSHIP (JD/JW)
CHAPTER PDL3 III : POSTURE, BEARING & TURNOUT, AND ETIQUETTE

"A good stance and posture reflect a proper state of mind."



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 1st Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/Lesson Plan; Board & Markers/OHP with Screen; Presentation, Charts or Diagrams; Handouts on Personality Development and Videos on Good Posture and Turnout.

Time Plan

- Introduction : 05 Mins
- Part I : 12 Mins
- Part II : 10 Mins
- Part III : 08 Mins
- Conclusion : 05 Mins



INTRODUCTION

1. Posture, bearing and turn-out, and etiquette are not mere physical attributes; they are reflections of an individual's character, discipline, and respect for others. These elements play a pivotal role in shaping one's personality and leaving a lasting impression. This chapter delves into the importance of these often-neglected aspects, exploring how they can enhance an individual's overall demeanour and confidence. By understanding and practicing these principles, one can project a positive image, command respect, and succeed in various aspects of life.



LEARNING OBJECTIVES

- Understand the importance of bearing & turnout, posture, and physical appearance
- Demonstrate proper uniform standards and smart turnout
- Develop social skills, etiquette, and manners for effective interactions
- Examine the role of etiquette and manners in social life

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Posture.
- (b) Part II : Bearing and Turnout.
- (c) Part III : Etiquette

INTERESTING FACTS

- Good posture makes you look taller and more confident.
- Sitting up straight can improve your concentration and focus.
- Good bearing helps you feel strong and stable.
- Good turnout improves your balance and coordination.
- Saying "please" and "thank you" can work magic!

PART I : POSTURE

2. Posture and bearing are fundamental aspects of personal presentation. Good posture involves standing or sitting upright, with your shoulders back and your head held high. It conveys confidence, alertness, and respect. Slouching, on the other hand, can make you appear lazy, disinterested, and even insecure. While bearing and posture are related terms, they have distinct meanings.

(a) **Posture.** Refers to the physical position of the body, such as standing up straight or slouching. It is a static state.

(b) **Bearing.** Encompasses both posture and overall demeanour. It's how a person carries himself or herself, including their body language, confidence level, and overall impression.

INTERESTING FACTS

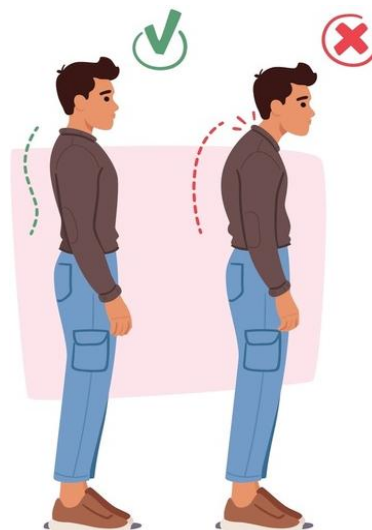
- Your bearing highlights your Personality .
- Politeness is a sign of respect.
- A strong posture reflects a strong mind.

3. **Importance of Good Physical Appearance and Dress of NCC Cadet.**

(a) **First Impressions.** Physical appearance plays a significant role in forming initial perceptions. A well-groomed and confident appearance can create a positive impression and make people feel more approachable and trustworthy.

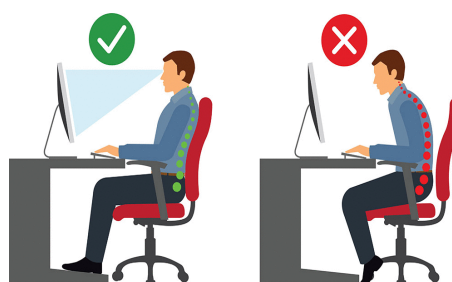
(b) **Dress of NCC Cadet.** Adhering to appropriate dress standards is crucial in various settings. Understanding the dress of an NCC cadet for different occasions can prevent embarrassing situations and enhance your overall appearance.

(c) **Personal Grooming.** Maintaining a neat and well-groomed appearance is essential for projecting a positive image.



4. **Display Alertness and Smartness.** Alertness and smartness in posture and behaviour are essential for creating a positive impression, showcasing readiness, and reflecting discipline.

(a) **Alertness.** Maintain focus and attentiveness in all situations. Keep your eyes forward, making appropriate eye contact. Avoid appearing distracted or sluggish by keeping your body engaged and responsive.



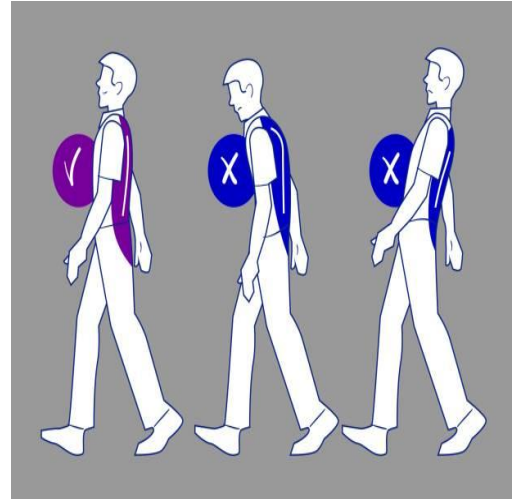
(b) **Smartness.** Exhibit confidence through a well-aligned, upright posture. Ensure neatness in personal appearance, such as tidy attire and grooming. Walk and move with purpose and precision, avoiding sloppiness or hesitation in actions.

5. **Developing Proper Posture for Displaying an Effective Personality.**

(a) **Stand Tall and Upright.** Keep your spine straight, with your shoulders slightly back and relaxed. Align your head with your spine, ensuring your chin is parallel to the floor. Avoid tilting your head down or forward.

(b) **Maintain Proper Posture While Sitting.** Sit with your back straight and shoulders relaxed. Don't 'round' your back. Avoid crossing your legs for long periods. Keep your head aligned with your spine and avoid slouching.

(c) **Proper Posture while Walking.** Walking with proper posture involves keeping your head level, shoulders relaxed, back straight, and core engaged. Avoid slouching or crossing your arms. Let your arms swing naturally at your sides. The size of the step should be as per height. This posture not only improves your appearance but also benefits your overall health and well-being.



PART II : BEARING & TURNOUT



6. **Wearing a Uniform is a Matter of Honour.** Wearing a uniform is not just about adhering to a dress code; it symbolizes **discipline, unity, and responsibility**. It is an **honour** bestowed by an institution or organisation, whether it's a school, military, or professional group.

7. **Why is Wearing of Uniform a Privilege?** For the following reasons:-

(a) **Symbol of Honour.** A uniform is a symbol of honour representing respect, integrity, and the recognition of values. It serves as a reminder of one's responsibilities and the high standards associated with the role or institution it represents.

(b) **Fosters Unity and Equality.** Unity and equality are essential for building strong communities. By treating everyone with fairness and promoting shared goals, a uniformed person fosters a sense of belongingness and collaboration among individuals, breaking divisive barriers.



(c) **Instils Discipline.** Uniform cultivates self-control, focus, and a strong work ethic, enabling individuals to achieve their goals.

(d) **Pride and Representation.** Pride in one's role or identity boosts confidence and motivation. Wearing of uniform fosters inclusivity and ensuring all members feel valued.

8. **Uniform Standards and Guidelines.** The uniform must meet high standards of neatness and functionality, ensuring a sharp appearance and comfort during movements. Here are the key guidelines to follow:-

(a) The uniform should be **well-fitted**, neither too tight nor too loose, allowing for **free movement** during drills and physical activities.

(b) Uniforms must be **washed and ironed** regularly, with **no crumples or wrinkles**. This ensures a professional and disciplined appearance.

(c) Shoes must be **polished to a high shine**, reflecting attention to detail. A well-polished pair of shoes demonstrates personal pride in one's appearance.

(d) **Badges must be shining** and, neatly affixed to the uniform using **Velcro** rather than pins to prevent damage to the fabric.

(e) The **beret** must be of the correct size, with the **crest aligned to the left eyebrow**. The beret should have the proper **tilt**, giving a professional and balanced appearance.

(f) The **length of the trousers** should be just right. **neither too short nor too long**. It should stop just above the shoe for a well-fitted look, maintaining uniformity and sharpness.

(g) By adhering to these standards, cadets demonstrate **discipline, pride, and respect** for their uniform and institution.

9. **Do's and Don'ts of Impressive Turnout.** Maintaining an impressive turnout reflects discipline, respect, and pride in your uniform.





Do's.

- (a) Wear the Uniform with Pride.
- (b) Keep Shoes Polished.
- (c) Affix Badges Correctly.
- (d) Maintain Proper Posture.
- (e) Wear Your Beret Properly.
- (f) Carry Yourself with Discipline.
- (g) Check Your Appearance Regularly.

Don'ts.

- (a) Don't Walk with Beret in Hand.
- (b) Don't Wear an Ill-fitting or Wrinkled Uniform.
- (c) Don't Neglect Footwear.
- (d) Don't Use Pins for Badges.
- (e) Don't Slouch or Rest on One Leg.
- (f) Don't forget to carry a handkerchief, even a mask where required.
- (g) Don't forget Personal Grooming.

PART III : ETIQUETTE

10. NCC (National Cadet Corps) is an organisation that emphasizes **discipline, respect,** and **responsibility** in its cadets. Proper etiquette is essential in maintaining the standards of the NCC. Here are some important etiquettes that every NCC cadet should follow:-

- (a) As an NCC cadet, you represent the organisation outside NCC activities. Your behaviour should reflect the values of the NCC – discipline, integrity, and respect.
- (b) Always salute officers and seniors as a sign of respect.
- (c) Use the appropriate titles like "Sir" or "Ma'am" when speaking to officers.
- (d) Greet seniors and instructors with respect and follow proper saluting protocol.
- (e) Respectfully and promptly carry out any instructions given by your superiors.
- (f) Always engage actively in drills, classes, and NCC events.



- (g) Volunteer for duties and be proactive in helping your teammates during training.
- (h) Help and support fellow cadets, fostering teamwork and camaraderie.
- (j) Haircuts should be neat, nails trimmed, and overall appearance should be clean and professional.
- (k) Regularly wash & iron your uniform and polish your shoes. Make sure all badges and insignia are properly attached and are shining.
- (l) Stay focused and avoid talking or distractions during parades and drills.

11. Proper etiquette in the NCC is a reflection of a cadet's character and commitment to the organisation's values. Adhering to these etiquette guidelines ensures that cadets carry themselves with pride, respect, and integrity, both in and out of uniform.



CONCLUSION

12. Posture, physical appearance, and adherence to dress codes are integral to projecting confidence, discipline, and professionalism. Good posture not only enhances health and appearance but also conveys attentiveness and readiness, key traits for cadets. Wearing a uniform is a privilege that symbolizes honour, unity, and responsibility, while adhering to proper grooming and etiquette reflects commitment to the values of the NCC. By maintaining a sharp turnout and upholding discipline in personal conduct, cadets represent the organisation with pride and excellence, embodying its core principles in every aspect of their demeanour.



SUMMARY

- Good posture ensures proper body alignment, while bearing encompasses posture and overall demeanour, reflecting confidence and discipline.
- Maintaining a neat appearance, adhering to dress codes, and grooming enhance first impressions, confidence, and professionalism.
- Wearing a uniform symbolizes honour, discipline, unity, and pride, requiring adherence to strict standards like proper fit, neatness, and polished shoes.
- Display focus, attentiveness, and a confident posture to create a positive impression.
- Cadets should exhibit discipline, respect & teamwork by maintaining proper grooming, respecting seniors, executing commands precisely, and adhering to organisational values.
- Emphasize polished shoes, neat uniforms, correct badge placement, and disciplined behaviour while avoiding wrinkled attire, poor posture, and neglecting details.



ASSESSMENT EXERCISE

Multiple-Choice Questions

Q1. What does good posture involve?

- (a) Slouching
- (b) Sitting with legs crossed
- (c) Standing and sitting upright with correct alignment
- (d) Keeping the body in a relaxed position

Q2. Which of the following is true about bearing?

- (a) It refers only to posture.
- (b) It includes both posture and overall demeanour.
- (c) It is the way you dress.
- (d) It is about how you walk.

Q3. Why is physical appearance important for first impressions?

- (a) It is irrelevant.
- (b) It helps in forming initial perceptions.
- (c) It only matters in professional settings.
- (d) It makes people feel uncomfortable.

Q4. Which of the following contributes to a smart and confident posture?

- (a) Slouching
- (b) Sitting with your legs crossed
- (c) Well-aligned, upright posture
- (d) Avoiding eye contact

Q5. What is important for maintaining good posture while sitting?

- (a) Cross your legs for comfort.
- (b) Slouch to relax your back.
- (c) Sit with your back straight and shoulders relaxed.
- (d) Lean forward continuously.

Q6. What does wearing a uniform symbolize?

- (a) Fashion
- (b) Discipline, unity, and responsibility
- (c) Comfort



(d) Personal freedom

Q7. Why is it important to wear your uniform with pride?

- (a) To show off your appearance
- (b) It reflects respect for the institution.
- (c) To be comfortable
- (d) It makes you stand out.

Q8. What should you avoid when wearing a uniform?

- (a) Wearing shoes polished
- (b) Using pins for badges
- (c) Affixing badges neatly
- (d) Checking your appearance regularly

Q9. What does the posture of NCC cadets signify?

- (a) Disrespect
- (b) Personal comfort
- (c) Discipline, respect, and responsibility
- (d) Lack of confidence

Q10. What should NCC cadets do when speaking to officers?

- (a) Address them casually.
- (b) Use appropriate titles like "Sir" or "Ma'am."
- (c) Avoid speaking to officers.
- (d) Only salute them.

Q11. Which of the following is a key etiquette for NCC cadets?

- (a) Wearing uniforms carelessly
- (b) Ignoring instructions from superiors
- (c) Saluting officers as a sign of respect
- (d) Avoiding participation in drills

Q12. What should NCC cadets do during drills?

- (a) Talk casually with teammates.
- (b) Execute commands with precision.
- (c) Ignore instructions if they are not clear.
- (d) Slouch during exercises.



Q13. What is one of the important standards for uniforms?

- (a) They should be untidy and loose.
- (b) They should be well-fitted and clean.
- (c) They should be worn without any grooming.
- (d) They should be extremely tight.

Q14. What is the purpose of maintaining alertness in posture and behaviour?

- (a) To show disinterest
- (b) To avoid attention
- (c) To create a positive impression and show readiness
- (d) To make others feel uncomfortable

Q15. Which of the following is important when polishing shoes for uniform standards?

- (a) Shiny shoes show lack of attention.
- (b) Shoes must be polished to a high shine to reflect attention to detail.
- (c) Shoes should be left unpolished for comfort.
- (d) Polishing is not necessary for shoes.

Q16. What is required for proper personal grooming in the NCC?

- (a) Haircuts should be messy.
- (b) Nails should be trimmed, and overall appearance should be clean.
- (c) Uniforms should be dirty.
- (d) Personal grooming is unnecessary.

Q17. Why should NCC cadets regularly check their appearance?

- (a) To ensure it reflects discipline and respect
- (b) To impress others
- (c) To look more casual
- (d) To avoid uniform mistakes

Q18. What should NCC cadets avoid doing during parades?

- (a) Staying focused and attentive
- (b) Talking or being distracted
- (c) Moving with precision
- (d) Saluting officers



Q19. What is a proper way to wear the beret in the uniform?

- (a) Tilt it to the right.
- (b) It should be of the correct size and crest aligned with the left eyebrow.
- (c) No need to wear the beret.
- (d) Wear it loosely on your head.

Q20. What should a cadet do if they notice their uniform is wrinkled?

- (a) Ignore it.
- (b) Leave it for later.
- (c) Wear it as is.
- (d) Fix the wrinkles immediately to maintain neatness.

Short Answer Questions

- Q1. Define posture.
- Q2. What is bearing, and how does it differ from posture?
- Q3. Why is maintaining good posture important for health?
- Q4. What role does physical appearance play in first impressions?
- Q5. List two benefits of good posture.

Long Answer Questions

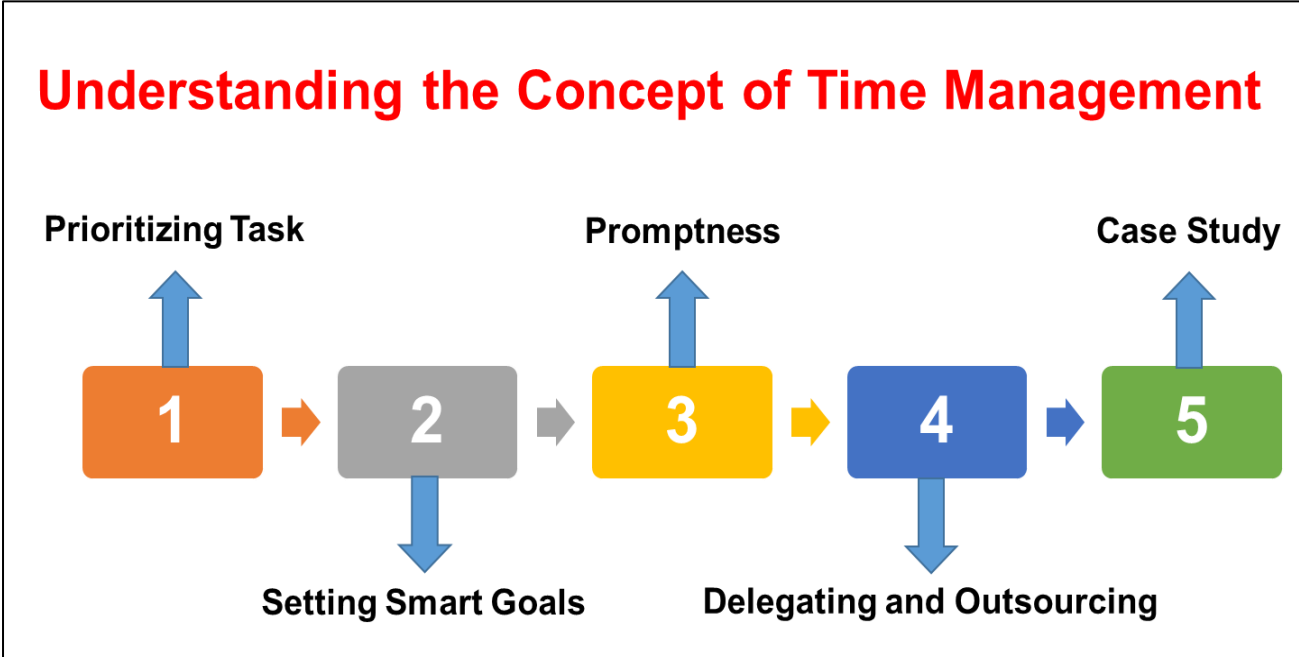
- Q1. Discuss the importance of good posture in professional and social settings.
- Q2. How does wearing a uniform foster unity, equality, and discipline?
- Q3. Explain the benefits of maintaining proper posture while sitting, particularly in an office or classroom environment.
- Q4. Why is personal grooming important in professional environments, and what impact does it have on first impressions?
- Q5. How can common posture problems negatively impact a person's physical health and appearance?



PERSONALITY DEVELOPMENT & LEADERSHIP (JD/JW)

CHAPTER PDLS IV : TIME MANAGEMENT, TEAMWORK, COMMUNICATION SKILLS

“Tough time never lasts, but tough people do.”



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 2nd Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/Lesson Plan; OHP, Board and Chalk/Markers
Concerns.

Time Plan

- Introduction : 05 Mins
- Part I : 10 Mins
- Part II : 10 Mins
- Part III : 10 Mins
- Conclusion : 05 Mins



INTRODUCTION

1. In today's fast-paced world, mastering time management is crucial for achieving personal and professional goals. This chapter delves into effective strategies to optimize your time, reduce digital distractions, and enhance your productivity. We will explore techniques to prioritise tasks, set realistic goals, and create a structured schedule. Additionally, we will discuss the importance of minimizing digital dependency and reclaiming your focus. Effective teamwork and strong communication skills are essential for success in both academic and professional settings. This chapter will provide insights into fostering collaborative environments, resolving conflicts, and building strong relationships. We will explore strategies for active listening, effective speaking, and nonverbal communication. By mastering these skills, you can enhance your teamwork abilities and become a valuable asset to any team.



LEARNING OBJECTIVES

- Understand and apply effective time management strategies
- Develop skills for setting smart goals and creating structured schedules
- Analyse the importance of teamwork and cooperation for achieving goals
- Enhance verbal and non-verbal communication skills for effective interaction

PREVIEW

The lecture will be conducted in the following parts:-

- (a) Part I : Time Management and Digital Dependency
- (b) Part II : Teamwork
- (c) Part III: Communication Skills

INTERESTING FACTS

- Taking a break from screens can improve concentration and creativity by up to 30%.
- Teams with diverse backgrounds are 35% more likely to outperform non-diverse teams.
- The average person only remembers 25% of what they hear, which highlights the importance of active listening.



PART I : TIME MANAGEMENT AND DIGITAL DEPENDENCY

2. **Understand the Importance of Time and its Effective Use.** Understanding the importance of time and its effective use involves recognising that time is a finite and valuable resource. Proper time management allows individuals to prioritise tasks, set achievable goals, reduce stress, and increase productivity.

3. **Principles of Time Management.** Examining the principles of time management involves understanding core strategies that help individuals use their time more efficiently. These principles include:-

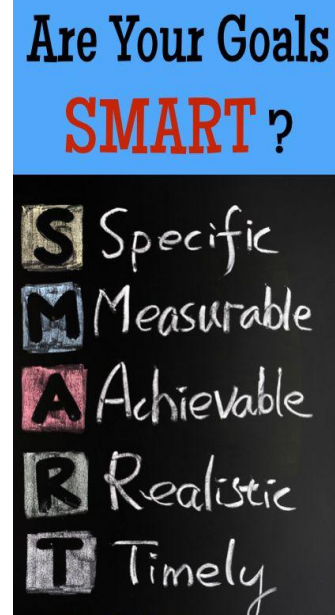
- (a) **Prioritisation.** Focus on the most important and urgent tasks first.
- (b) **Goal Setting.** Establish clear, specific, and achievable goals to guide your efforts.
- (c) **Planning.** Create to-do lists to allocate time effectively.
- (d) **Focus.** Minimize distractions to maximize productivity and efficiency.

4. **Creating Schedules.**

- (a) **Daily Schedule.** Break down your day into specific time blocks for different tasks.
- (b) **Weekly Schedule.** Plan your activities for the entire week, considering frequent appointments and commitments.
- (c) **Monthly Schedule.** Outline your long-term goals and allocate time for each project or activity.

5. **Setting SMART Goals.**

- (a) **Specific.** Clearly define what you want to achieve.
- (b) **Measurable.** Set quantifiable targets to track progress.
- (c) **Achievable.** Ensure your goals are realistic and attainable.
- (d) **Relevant.** Align your goals with your overall objectives.
- (e) **Time-bound.** Set deadlines to create a sense of urgency.



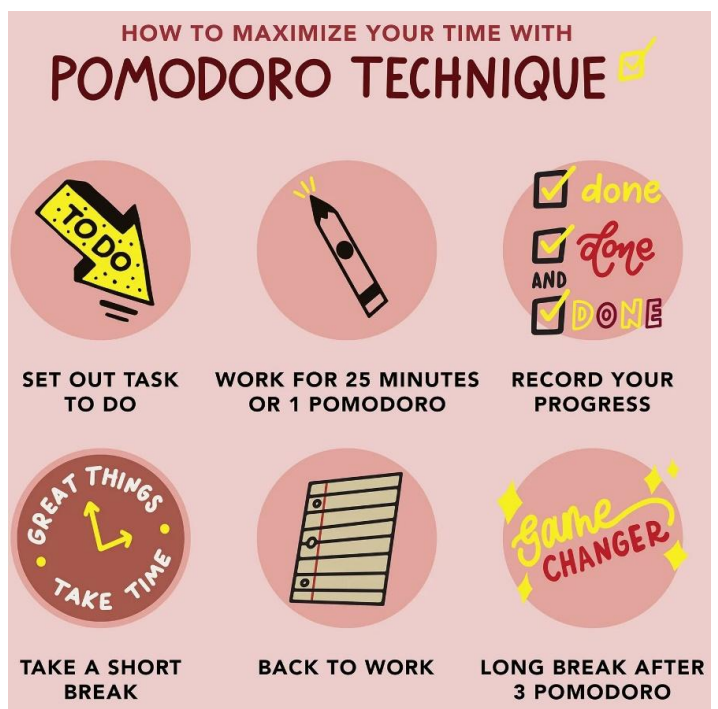
6. Prioritising Tasks.

- Tasks that need immediate attention and should be done first.
- Tasks that are vital for long-term goals but don't require immediate action.
- Tasks that require immediate attention
- Tasks that are distractions and can be eliminated.

7. Time blocking and the Pomodoro technique are effective strategies for managing time and boosting productivity.

(a) **Pomodoro Technique.** Breaks work into intervals, typically 25 minutes of focused work (called a "Pomodoro") followed by a 5-minute break. After four Pomodoros, take a longer break (15-30 minutes). This technique promotes sustained concentration and helps prevent burnout by incorporating regular short breaks.

(b) **Time Blocking.** Involves dividing your day into specific blocks of time dedicated to particular tasks or activities. For example, you can block 9.00-11.00 AM for project work, 11.30-12.30 PM for meetings, etc.



8. Adverse Impacts of Digital Overuse.

- Loss of Originality.** Excessive reliance on digital content can lead to a lack of creativity and originality.
- Loss of Efficiency.** The constant distractions from notifications, emails, and social media.
- Digital Fatigue.** Spending extended periods on digital devices can lead to mental and physical fatigue.
- Erosion of Social Skills.** Overuse of digital communication can impact face-to-face interaction skills.



9. Setting Boundaries for Digital Device Usage.

- (a) **Designated Device-Free Zones.** Create areas in your home or workplace where digital devices are not allowed.
- (b) **Time Limits.** Set specific time limits for using digital devices.
- (c) **Mindful Usage.** Be conscious of how much time you spend on digital devices and avoid mindless scrolling.

HIGHER ORDER THINKING SKILLS (HOTS)

- **Make a personalized time management plan to effectively balance your school assignments, extracurricular activities, and personal time, ensuring you stay organised and have time for hobbies and relaxation besides studies.**

PART II : TEAMWORK

10. **Team Work is a Force Multiplier.** When individuals work together towards a common goal, they can leverage their diverse skills, perspectives, and strengths to accomplish far more than they could individually.

11. Importance of Teamwork.

- (a) **Synergy.** When individuals work together effectively, they can create a synergistic effect, where the combined output is greater than the sum of their individual efforts.
- (b) **Shared Responsibility.** Teamwork promotes a sense of shared responsibility, where everyone feels accountable for the team's success.
- (c) **Problem-Solving.** Diverse perspectives and skills enable teams to identify and solve problems more effectively.
- (d) **Motivation.** Working with others can provide motivation, encouragement, and support.
- (e) **Learning and Growth.** Teamwork offers opportunities for personal and professional growth through collaboration and learning from others.



12. **Aligning Personal Goals with Team Objectives.**

- (a) **Shared Vision.** Ensure that individual goals are aligned with the team's overall objectives.
- (b) **Open Communication.** Communicate your goals openly with your team members to foster understanding and support.
- (c) **Flexibility.** Be willing to adjust your goals to contribute to the team's success.

13. **Types and Characteristics of Groups/Teams.**

- (a) **Formal Groups.** Created by organisations to achieve specific goals, such as project teams.
- (b) **Informal Groups.** Formed spontaneously based on shared interests or common goals.
- (c) **Functional Groups.** Composed of individuals with similar roles or responsibilities.
- (d) **Cross-functional groups.** Bring together individuals from different departments or areas of expertise.

14. **Developing a Sense of Cooperation for Group/Teamwork.** By understanding the importance of the following aspects, you can contribute to the success of your team and achieve great results together:-

- (a) **Effective Communication.** Open, honest, and active communication is essential for effective teamwork.
- (b) **Trust and Respect.** Build trust and respect among team members by demonstrating reliability, honesty, and support.
- (c) **Conflict Resolution.** Develop skills for resolving conflicts constructively and maintaining positive relationships.
- (d) **Active Listening.** Practice active listening to understand the perspectives of others and build empathy.
- (e) **Collaboration.** Work together towards common goals, sharing ideas and responsibilities.
- (f) **Support and Encouragement.** Offer support and encouragement to your team members, creating a positive and supportive environment.





PART III : COMMUNICATION SKILLS

15. **Styles and Ways of Communication.** Communication is the process of exchanging information, ideas, thoughts, and feelings between individuals or groups. There are various styles and ways of communication, each with its own strengths and weaknesses.

(a) **Assertive.** Expressing your thoughts and feelings in a direct, honest, and respectful manner.

(b) **Passive.** Avoiding the direct expression of thoughts or feelings, often prioritising others' needs over one's own. This can lead to resentment, frustration, and stress.

(c) **Aggressive.** Expressing your needs or desires in a demanding, hostile, or forceful way. This style often violates the rights of others, causing conflict and damaging relationships.

(d) **Passive-Aggressive.** Indirectly expressing negative feelings or resentment while outwardly appearing passive. The communication may be sarcastic, subtle, or manipulative, which can create tension and confusion.

16. **Ways of Communication.**

(a) **Verbal Communication.** Using spoken or written words to convey messages.

(b) **Nonverbal Communication.** Using body language, facial expressions, gestures, and tone of voice to communicate.

(c) **Written Communication.** Using written words to convey messages, such as letters, emails, and reports.

(d) **Oral Communication.** Using spoken words to convey messages, such as face-to-face conversations, phone calls, and presentations.

17. **Enhancing Communication Skills in an Effective Style.**

(a) **Active Listening.** Pay attention to what the other person is saying, ask clarifying questions, and provide feedback.

(b) **Empathy.** Try to understand the other person's perspective and feelings.

(c) **Clarity and Conciseness.** Express your thoughts and ideas clearly and concisely, avoiding jargon.

(d) **Conflict Resolution.** Develop skills for resolving conflicts effectively and maintaining positive relationships.



(e) **Adaptability.** Be able to adjust your communication style to suit different situations and audiences.

18. **Inculcate Verbal and Non-Verbal Communication Skills.** By developing strong communication skills, you can improve your relationships, enhance your career prospects, and become a more effective leader:-

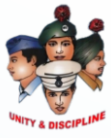
(a) **Verbal Communication.** Verbal communication is a fundamental skill that involves effectively expressing ideas through spoken words. To enhance this skill, it is essential to **enlarge your vocabulary**, which allows for more precise and impactful communication. Regularly reading and learning new words can significantly improve how you articulate thoughts. Additionally, **practicing public speaking** helps build confidence and clarity in delivering messages to various audiences.

(b) **Nonverbal Communication.** Nonverbal communication plays a vital role in conveying messages beyond words. Being **aware of your body language** is crucial, as gestures, posture, and movements can significantly impact how others perceive your message. Maintaining **eye contact** shows confidence and attentiveness, building trust and rapport with your audience. **Appropriate facial expressions** help convey emotions and reinforce the intent behind your words, making communication more engaging.



CONCLUSION

19. In conclusion, mastering time management, teamwork, and effective communication is essential for personal and professional success. By prioritising tasks, setting clear goals, and using techniques like time blocking, individuals can optimize their productivity and achieve a better work-life balance. Addressing digital dependency through mindful boundaries and engaging in offline activities enhances focus and creativity. Teamwork fosters collaboration and shared responsibility, while strong communication skills improve interactions and adaptability. Together, these practices contribute to greater efficiency, stronger relationships, and holistic growth in all aspects of life.



SUMMARY

- Prioritise tasks, set SMART goals, plan daily, weekly, and monthly schedules, and use techniques like time blocking and Pomodoro to improve productivity.
- Limit digital device use to avoid distractions, reduce digital fatigue, and maintain a healthy balance in personal and professional life.
- Collaboration creates synergy, shared responsibility, and problem-solving opportunities, fostering motivation, growth, and support within a group.
- Effective communication, trust, respect, conflict resolution, and active listening are essential for successful teamwork.
- Be aware of assertive, passive, aggressive, and passive-aggressive communication styles, and practice clarity, empathy, and active listening for effective interaction.
- Develop verbal skills through active listening, feedback, and public speaking, while enhancing non-verbal communication by paying attention to body language, eye contact, and tone.



ASSESSMENT EXERCISE

Multiple-Choice Questions

Q1. What is the primary benefit of time management?

- (a) Reducing stress
- (b) Increasing distractions
- (c) Wasting time
- (d) Limiting productivity

Q2. Which of the following is a core principle of time management?

- (a) Procrastination
- (b) Prioritisation
- (c) Multitasking
- (d) Ignoring deadlines

Q3. What does the SMART acronym in goal setting stand for?

- (a) Simple, Manageable, Attainable, Reliable, Timely
- (b) Specific, Measurable, Achievable, Relevant, Time-bound
- (c) Special, Meaningful, Aggressive, Ready, Tracked
- (d) Serious, Meaningful, Artistic, Real, Time-focused

Q4. Which of the following is a time management technique that involves working in focused intervals?

- | | |
|------------------------|--------------------|
| (a) Time blocking | (b) Multitasking |
| (c) Pomodoro technique | (d) Task switching |

Q5. What is the main advantage of creating a daily schedule?

- (a) Helps in allocating time effectively for various tasks.
- (b) Increases distractions
- (c) Decreases productivity
- (d) Creates confusion

Q6. Which of the following is an adverse impact of excessive digital device usage?

- (a) Improved creativity
- (b) Digital fatigue
- (c) Increased social interaction
- (d) Enhanced productivity



Q7. How can digital device usage be effectively managed?

- (a) By allowing unlimited usage
- (b) By setting time limits
- (c) By ignoring device-free zones
- (d) By always using devices at home

Q8. What is the definition of synergy in teamwork?

- (a) Team members working independently
- (b) Team members competing against each other
- (c) Team members avoiding conflict
- (d) Team members combining efforts for greater output

Q9. Which of the following is a characteristic of effective teamwork?

- (a) Working in isolation
- (b) Trust and respect among team members
- (c) Prioritising individual success over team success
- (d) Avoiding communication

Q10. Which type of group is created by an organisation to achieve specific goals?

- (a) Informal group
- (b) Formal group
- (c) Cross-functional group
- (d) Functional group

Q11. What is the role of effective communication in teamwork?

- (a) To ensure misunderstandings
- (b) To promote open, honest, and active exchanges
- (c) To ignore feedback from team members
- (d) To avoid discussing issues openly

Q12. Which style of communication involves expressing thoughts directly and respectfully?

- (a) Passive
- (b) Assertive
- (b) Aggressive
- (c) Passive-Aggressive

Q13. What is the primary difference between verbal and nonverbal communication?

- (a) Verbal communication uses written words; nonverbal does not.



- (b) Verbal communication uses body language; nonverbal does not.
- (c) Verbal communication involves spoken or written words; nonverbal involves body language and tone.
- (d) Verbal communication is less important than nonverbal communication.

Q14. What does active listening in communication involve?

- (a) Ignoring the speaker's emotions
- (b) Focusing on what the speaker is saying and providing feedback
- (c) Planning your response while the other person is speaking
- (d) Interrupting the speaker to offer your perspective

Q15. What is one of the key skills for conflict resolution in a team?

- (a) Avoiding the conflict altogether
- (b) Active listening and understanding all perspectives
- (c) Ignoring team members' concerns
- (d) Competing with others

Q16. Which of the following is a passive communication style?

- (a) Expressing thoughts and feelings directly and respectfully
- (b) Prioritising others' needs over one's own and avoiding direct expression
- (c) Making forceful demands
- (d) Using sarcasm in conversation

Q17. What is the purpose of the Pomodoro technique?

- (a) To avoid taking breaks while working
- (b) To work in focused intervals with short breaks
- (c) To increase multitasking efficiency
- (d) To work without time constraints

Q18. How can you improve your verbal communication skills?

- (a) By avoiding public speaking
- (b) By expanding your vocabulary and practicing speaking
- (c) By staying silent in conversations
- (d) By only speaking when asked

Q19. What does prioritisation in time management help with?

- (a) Focusing on trivial tasks
- (b) Completing less important tasks first



- (c) Completing the most important and urgent tasks first
- (d) Avoiding tasks altogether

Q20. Which of the following is a characteristic of nonverbal communication?

- (a) Using words to convey messages
- (b) Relying on facial expressions, gestures, and body language
- (c) Sending messages via email
- (d) Writing formal reports

Short Answer Questions

- Q1. What are the two benefits of effective time management?
- Q2. Name one method to reduce screen time in daily life.
- Q3. What is the role of active listening in effective communication?
- Q4. Define teamwork in your own words.
- Q5. List one characteristic of an effective team.

Long Answer Questions

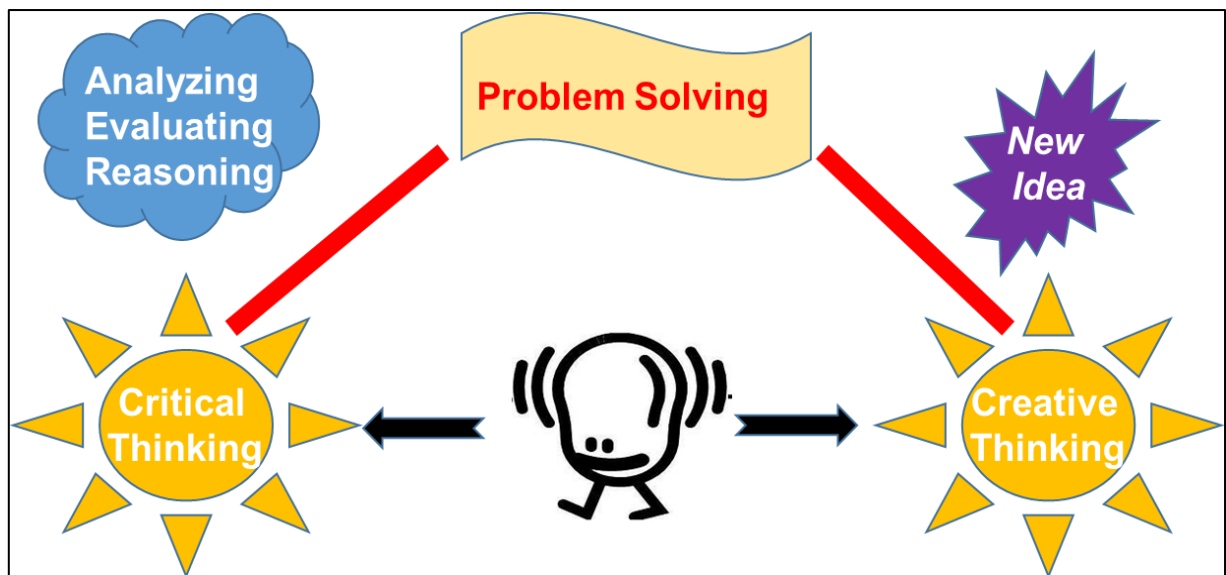
- Q1. Discuss the importance of setting SMART goals in time management. Provide an example of a SMART goal.
- Q2. Explain the adverse impacts of digital overuse on personal well-being. How can individuals set boundaries to mitigate these effects?
- Q3. Describe the characteristics of effective communication and their significance in teamwork.
- Q4. Analyse the benefits of teamwork and how individuals can align their personal goals with team objectives.
- Q5. Discuss the principles of time management and how they can be applied in a professional setting.

PERSONALITY DEVELOPMENT & LEADERSHIP (JD/JW)

CHAPTER PDLS V : CRITICAL THINKING, DECISION MAKING, READING HABITS

*“The purpose of education is to make good human beings with skill and expertise.
Enlightened human beings can be created by teachers.”*

Former President Dr. APJ Abdul Kalam



TEACHING INSTRUCTIONS

Period	: One (01)
Type	: Lecture and Practice
Year	: 2nd Year JD/JW
Conducting Officer	: Associate NCC Officer
<u>Training Aids</u>	: Script/Lesson Plan; Board & Markers/OHP with Screen; Presentation, Charts or Diagrams; Templates for Structured Thinking Processes like SWOT and Test Exercises on Application of Analytical Thinking.

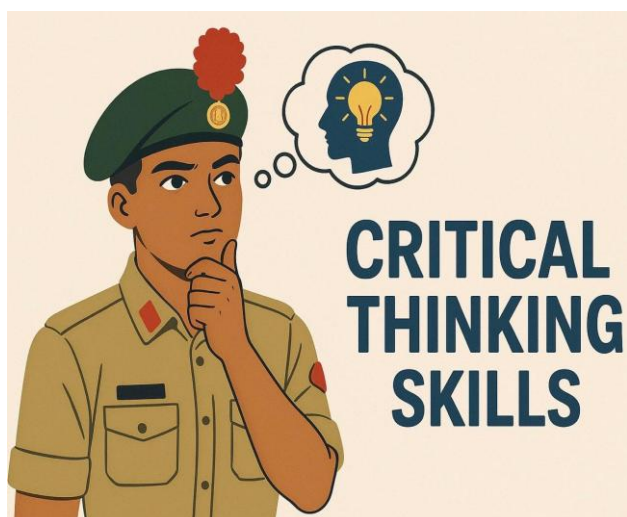
Time Plan

• Introduction	: 05 Mins
• Part I	: 12 Mins
• Part II	: 10 Mins
• Part III	: 08 Mins
• Conclusion	: 05 Mins



INTRODUCTION

1. In today's complex world, possessing strong critical thinking, effective decision-making, and a voracious reading habit are essential skills that empower individuals to navigate challenges and seize opportunities. This chapter delves into these crucial cognitive abilities, exploring their significance and practical applications. We will examine the art of critical thinking, dissecting information, questioning assumptions, and evaluating evidence. We will also explore the intricacies of decision-making, from defining problems to implementing solutions. Additionally, the chapter will highlight the profound impact of reading on cognitive development, knowledge acquisition, and personal growth. By cultivating these skills, we can unlock our full potential and become informed, discerning, and successful individuals.



LEARNING OBJECTIVES

- Understand critical and creative thinking concepts
- Analyze and apply critical thinking skills objectively
- Develop creative problem-solving and decision-making abilities
- Critically engage with literature to foster social and cultural change.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Critical Thinking
- (b) Part II : Decision-Making
- (c) Part III : Reading Habits

INTERESTING FACTS

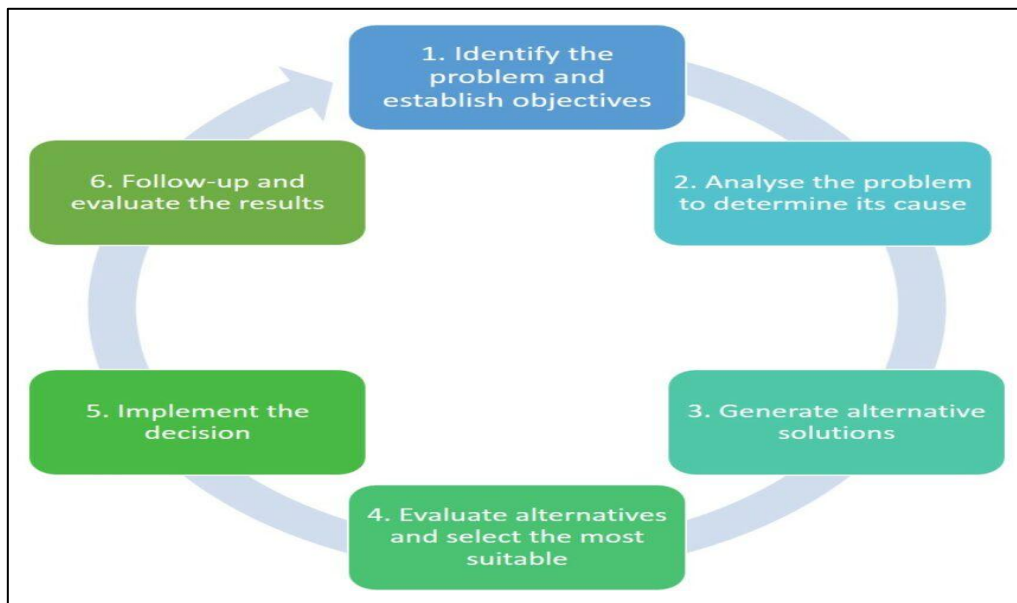
- Critical thinking helps you see the bigger picture and uncover hidden meanings.
- People who read regularly tend to live longer.
- Studies indicate that about 93% of employers consider critical thinking essential when evaluating job candidates.

PART I : CRITICAL THINKING

2. **Understanding the Concept of Critical and Creative Thinking.** While critical and creative thinking are often seen as separate processes, they are interconnected. Critical thinking provides the foundation for evaluating ideas, while creative thinking generates new possibilities:-

(a) **Critical Thinking.** Involves the ability to analyse information, evaluate arguments, and make informed judgements. It requires a systematic approach to problem-solving, considering different perspectives, and identifying assumptions or biases.

(b) **Creative Thinking.** Involves generating new ideas, solutions, or perspectives. It requires imagination, flexibility, and the ability to think outside the box.



3. **Analyse the Critical Thinking Ability in an Objective Manner.** Critical thinking is a cognitive skill that involves analysing information objectively, evaluating evidence, and forming sound judgements. It is a vital skill that empowers individuals to make informed decisions, solve problems effectively, and think creatively:-

(a) **Key Components of Critical Thinking.** Critical thinking is a cognitive skill that involves analysing information objectively, evaluating evidence, and forming sound judgements. It is composed of several key components. **Analysis** involves breaking down complex information into smaller parts to understand the underlying structure. **Evaluation** assesses the credibility and relevance of information, while **inference** draws logical conclusions based on evidence. **Problem-solving** entails identifying problems, generating potential solutions, and selecting the best course of action. Finally, **creativity** involves thinking outside the box and generating innovative ideas.

(b) **Developing Critical Thinking Skills.** To cultivate critical thinking skills, individuals can adopt several strategies. **Being inquisitive** encourages curiosity and a questioning mindset. **Seeking diverse perspectives** broadens understanding and



challenges assumptions. **Active listening** involves paying close attention to details and asking clarifying questions. Engaging in **debates and discussions** refines arguments and promotes critical thinking. Lastly, **reading widely** exposes individuals to diverse ideas and perspectives, stimulating thought and fostering intellectual growth. By developing critical thinking skills, individuals can become more informed, adaptable, and successful in various aspects of life.

4. **Inculcate the Critical and Creative Qualities by Applying Existing Ideas.**

Inculcating critical and creative qualities involves the deliberate application of existing ideas while encouraging new ways of thinking and problem-solving. Both critical and creative thinking complement each other-critical thinking focuses on analysing and evaluating ideas, while creative thinking fosters innovation and exploration of new possibilities. We can nurture these qualities using existing ideas:-

(a) **Adaptation and Transformation of Ideas.** Apply existing ideas in new contexts. For example, using design thinking from product development in education can spark creativity and improve critical thinking.

(b) **Socratic Questioning.** Use probing questions like "Why does this work?" to critically analyse ideas, uncover assumptions, and inspire creative improvements.

(c) **Combination of Ideas.** Blend different or unrelated ideas to solve problems creatively by drawing on various theories or perspectives.

(d) **Reflection and Iteration.** Regularly review, critique, and refine ideas to build on past knowledge and enhance them over time.

HIGHER ORDER THINKING SKILLS (HOTS)

- **Information influences opinions. How can we distinguish between reliable and unreliable sources of information in today's age to make informed opinions?**

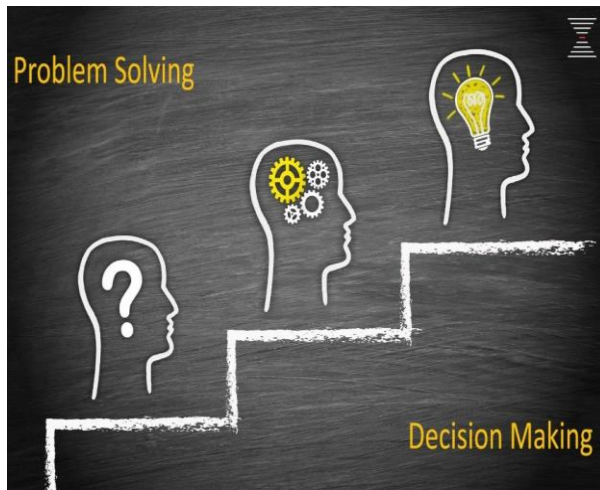
PART II : DECISION MAKING

5. **Understanding Decision-Making and Problem-Solving Skills.** Decision-making and problem-solving are essential cognitive skills used to identify challenges and select effective solutions. Decision-making involves choosing the best course of action among available alternatives, while problem-solving focuses on breaking down and resolving complex issues. Both skills rely on critical thinking, creativity, and logical reasoning to ensure informed, practical outcomes.

6. **Decision-Making.** Decision-making focuses on selecting the best course of action from multiple alternatives. It requires gathering relevant information, evaluating pros and cons, considering possible outcomes, and making a choice that aligns with goals. Effective

decision-makers balance logic, intuition, and risk assessment to make sound judgements, often under pressure or uncertainty.

6. **Problem-Solving.** Problem-solving, on the other hand, involves identifying and addressing an issue by breaking it down into manageable parts. It typically follows steps like defining the problem, exploring potential causes, brainstorming solutions, and implementing the best one. Problem-solving demands creativity, critical thinking, and adaptability, especially when unexpected obstacles arise.



DID YOU KNOW?

- **Decisions are choices.** You get to pick what you want to do or have!
- **Think before you choose.** It's okay to take time to think about your options.
- **Ask yourself questions.** What are the positive things about each choice?
- It is okay to make mistakes.
- Bad decision is better than not taking any decision!

PART III : READING HABITS

7. **Understanding Ethos and Values through Reading Books.**

(a) Reading books can acquaint you with different cultures, perspectives, and values. By understanding the ethos (beliefs and character) of the characters in a book, you can gain insights into their motivations and actions.

(b) Analysing novels critically and in the context of your own lived situations.

(c) Critical reading involves analysing the text, evaluating the author's arguments, and considering different perspectives. By relating the characters and events in a novel to your own experiences, you can gain a deeper understanding of the themes and messages.

(d) Reading can be a powerful tool for social and cultural change. By introducing us to different ideas and perspectives, reading can challenge our assumptions and broaden our horizons.





8. Benefits of Reading Daily.

- (a) Increased knowledge and understanding.
- (b) Enhanced thinking skills.
- (c) Stress reduction
- (d) Improved vocabulary

CONCLUSION

9. In conclusion, critical and creative thinking are essential, interconnected processes that drive logical evaluation and innovation, forming the foundation for effective decision-making and problem-solving. These skills, nurtured through open-mindedness, evidence-based reasoning, and reflective practices, enable individuals to approach challenges constructively and adapt solutions to diverse contexts. Regular reading further enhances these abilities by offering cultural insights, challenging norms, and fostering empathy, while also contributing to cognitive growth, stress reduction, and communication skills. Together, these qualities empower individuals to think critically, innovate creatively, and make impactful decisions in personal and social spheres.

SUMMARY

- Critical thinking involves analysing information and evaluating ideas, while creative thinking fosters innovation. Both skills are interconnected and complement each other, enhancing problem-solving and decision-making.
- Effective decision-making involves selecting the best action from alternatives, while problem-solving breaks down complex issues. Both require critical thinking, creativity, and adaptability to find practical solutions and learn from past outcomes.
- A solution-orientated mindset is key for facing problems constructively. By analysing challenges calmly, brainstorming solutions, and taking decisive action, individuals can resolve issues effectively.
- Monitoring, evaluating, and learning from decisions is essential for improving future decision-making. Regular review and adaptation foster continuous growth and better judgement.
- Reading books introduces readers to diverse cultures, perspectives, and values, encouraging critical analysis of societal issues. Literature can inspire social and cultural change by challenging assumptions and broadening horizons.
- Daily reading enhances knowledge, critical thinking, vocabulary, and stress reduction, contributing to overall personal growth and well-being.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the primary function of critical thinking?

- (a) Generating new ideas
- (b) Analysing information and making informed judgements
- (c) Writing reports
- (d) Organising data

Q2. What is a key requirement for creative thinking?

- (a) Logical reasoning
- (b) Imagination and flexibility
- (c) Data collection
- (d) Calculations

Q3. How are critical thinking and creative thinking related?

- (a) They are unrelated processes.
- (b) Critical thinking is only for analysing, while creative thinking is only for generating ideas.
- (c) They complement each other—critical thinking evaluates ideas, and creative thinking generates new possibilities.
- (d) Creative thinking is a subset of critical thinking.

Q4. What does analysing critical thinking ability objectively involve?

- (a) Breaking it down into measurable components
- (b) Following the same procedures every time
- (c) Avoiding subjective thoughts
- (d) None of the above

Q5. Which method helps in critically analysing ideas?

- (a) Ignoring assumptions
- (b) Socratic questioning
- (c) Reducing creativity
- (d) Focusing on conclusions only

Q6. What do reflection and iteration in creative thinking involve?

- (a) Ignoring feedback
- (b) Regularly reviewing and refining ideas



- (c) Discarding old ideas
- (d) Staying fixed in one approach

Q7. What is the goal of decision-making?

- (a) To analyse the situation
- (b) To choose the best course of action from available alternatives
- (c) To avoid risks
- (d) To gather data

Q8. What does problem-solving focus on?

- (a) Making quick decisions
- (b) Avoiding difficult problems
- (c) Gathering information only
- (d) Breaking down and resolving complex issues

Q9. Which of the following is a key part of problem-solving?

- (a) Ignoring potential causes
- (b) Brainstorming solutions
- (c) Making decisions based solely on intuition
- (d) Skipping the analysis phase

Q10. What is important when facing problems constructively?

- (a) Avoiding all challenges
- (b) Maintaining a solution-orientated mindset
- (c) Ignoring feedback
- (d) Dwelling on the problem

Q11. Why is it important to monitor decisions after making them?

- (a) To avoid making any changes
- (b) To evaluate outcomes and make necessary adjustments
- (c) To ignore feedback
- (d) To justify past decisions

Q12. How can reading books help in understanding ethos and values?

- (a) By providing entertainment
- (b) By offering solutions to personal problems



- (c) By exposing readers to different cultures, perspectives, and values
- (d) By focusing on fictional characters only

Q13. What is critical reading?

- (a) Simply enjoying a book
- (b) Analysing the text, evaluating the author's arguments, and considering different perspectives
- (c) Memorising the content
- (d) Reading quickly for fun

Q14. What role does reading play in social and cultural change?

- (a) It only entertains readers.
- (b) It challenges assumptions and broadens horizons, promoting empathy and activism.
- (c) It serves as a personal escape.
- (d) It promotes a fixed worldview.

Q15. Why is it important to analyse novels in the context of one's lived experiences?

- (a) To enjoy the plot
- (b) To understand the text's themes and connect them to personal experiences
- (c) To criticise the author
- (d) To find fault with characters

Q16. What can books inspire in readers?

- (a) Laziness
- (b) Complete conformity
- (c) Social and cultural transformation
- (d) None of the above

Q17. What are the benefits of daily reading?

- (a) Increased knowledge and improved vocabulary
- (b) Decreased thinking skills
- (c) Increased stress and poor sleep
- (d) Reduced vocabulary

Q18. Which skill is enhanced through daily reading?

- (a) Decreased thinking skills
- (b) Enhanced thinking skills



- (c) Reduced knowledge
- (d) Loss of creativity

Q19. What is a benefit of reading in terms of stress?

- (a) It increases stress.
- (b) It reduces stress and improves sleep.
- (c) It disrupts sleep patterns.
- (d) It makes problems seem bigger.

Q20. What does the combination of creative and critical thinking lead to?

- (a) A holistic approach to problem-solving
- (b) Stagnation
- (c) Increased confusion
- (d) Reduced problem-solving abilities

Short Answer Questions

- Q1. Define critical thinking in your own words.
- Q2. How do critical thinking and creative thinking complement each other?
- Q3. List two indicators of open-mindedness in critical thinking.
- Q4. What is the role of reflection in enhancing both critical and creative thinking?
- Q5. Why is it important to monitor and evaluate decisions after they are made?

Long Answer Questions

- Q1. Explain the measurable components of critical thinking and their importance.
- Q2. How does combining critical and creative thinking improve problem-solving skills?
- Q3. Discuss the significance of using Socratic questioning in developing both critical and creative thinking skills.
- Q4. Why is it important to approach problems constructively, and how can this mindset be developed?
- Q5. Explain how reading books can influence critical and creative thinking. Provide examples.

CYBER SCIENCE

3

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CYBER SCIENCE (JD/JW)

CHAPTER CS I : CYBER AND MOBILE SECURITY AWARENESS



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture and Practice
Year	:	1st Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/Lesson Plan; Interactive Learning Platforms; Smartboards and Interactive Whiteboards; Mobile Security Apps.

Time Plan

• Introduction	:	05 Mins
• Part I	:	07 Mins
• Part II	:	06 Mins
• Part III	:	06 Mins
• Part IV	:	06 Mins
• Part V	:	05 Mins
• Conclusion	:	05 Mins



INTRODUCTION

1. In today's digital age, technology plays a major role in our lives. From smartphones and tablets to laptops and desktops, we use a variety of devices to connect with others, complete schoolwork, play games, shop, and even manage our finances. However, with this increased use of technology, the risk of cyber threats has also risen. These threats can harm your devices, steal your personal information, and damage networks and programs. Cybersecurity and mobile security awareness are essential skills that everyone should understand. They involve practices and steps to protect your personal data, devices, and online presence. In this chapter, we will cover the basics of cybersecurity, common threats, privacy hazards, and the practical steps you can take to secure your devices and online activities.



LEARNING OBJECTIVES

- Basic understanding of cyber security and social media
- Basic knowledge of types of threats and targets for mobile devices
- Understanding hazards of privacy breach
- Knowledge of options available to protect personal cyber devices

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Understanding and Protecting Devices
- (b) Part II : Types of Cybersecurity Threats and Targets
- (c) Part III : Hazards of Privacy Breaches
- (d) Part IV : Developing Processes to Protect Networks, Devices, Programs & Data
- (e) Part V : Practical Steps to Minimise Digital Threats

INTERESTING FACTS

- India has scripted history with the fastest 5G rollout, surpassing targets across all 22 service areas within nine months. This success solidifies India's position as a global leader in 5G adoption.
- The Ministry of Communications has already evolved a Bharat 6G Vision document as a futuristic technology enabler.
- The "Bharat 6G Alliance" brings together various research agencies for development of 6G.



PART I : UNDERSTANDING AND PROTECTING DEVICES

2. **What is Cybersecurity.** Cybersecurity refers to the practice of protecting your devices, networks, and programs from digital attacks, damage, or unauthorized access. Just as you lock your doors to prevent theft, cybersecurity involves using tools and strategies to protect your online information.

3. **Types of Devices You Need to Protect.** Types of devices you need to protect include:-

(a) **Mobile Devices.** Smartphones and tablets, which store personal information and give access to social media, apps, and browsing.

(b) **Computers.** Laptops and desktops that contain sensitive data, such as school projects, personal photos, and documents.

(c) **IoT Devices.** Internet-connected devices like smartwatches, gaming consoles, or home assistants (Alexa, Google Home), which can also be vulnerable to cyber threats.

4. **How to Protect Your Devices.** Some simple and effective ways to protect your devices include:-

(a) **Use Strong Passwords.** Strong passwords are essential for protecting accounts and devices. A strong password should contain a mix of letters (uppercase and lowercase), numbers, and symbols, and should be at least 8 characters long.

(b) **Enable Two-Factor Authentication (2FA).** This adds an extra layer of protection by requiring not only a password but also a second form of identification, such as a text message code or authentication app.

(c) **Install Security Software.** Antivirus and anti-malware programs help detect and block potential threats from your devices.

(d) **Update Your Software Regularly.** Software updates often contain security patches that fix vulnerabilities. Always install updates for your operating system, apps, and security software.

(e) **Back Up Your Data.** Regularly back up your important files to a cloud service or external storage. In case of a cyber-attack, you can restore your data.

HIGHER ORDER THINKING SKILLS (HOTS)

- **Review your current mobile security settings and then assess what actions will you take to improve them?**



PART II : TYPES OF CYBERSECURITY THREATS AND TARGETS

5. **Cyber Threats** Cyber threats come in many forms, and knowing what to look out for is key to protecting your data. Some common cyber threats are:-

(a) **Phishing**. Phishing is when attackers send fraudulent emails or messages to trick you into revealing personal information like passwords or credit card numbers. *Example:* A fake email pretending to be from your bank asks you to click a link and enter your account details.

(b) **Malware**. Malware (malicious software) includes viruses, worms, and ransomware that are designed to damage or gain unauthorized access to your device. *Example:* A malicious app disguised as a game that infects your phone when downloaded.

(c) **Spyware**. Spyware secretly collects information about you without your knowledge, often including keystrokes, browsing history, and personal details. *Example:* A keylogger that records everything you type, including passwords.

(d) **Ransomware**. Ransomware locks your files or entire device and demands money in exchange for unlocking it. *Example:* A computer screen that tells you to pay a ransom to regain access to your files.

(e) **Adware**. Bombards users with unwanted advertisements and tracks online behaviour. *Example:* Launch a free video streaming website but build-in numerous ads on the website to allow streaming to start and track web activity of users using undeclared cookies.

(f) **Denial-of-Service (DoS) Attacks**. Overwhelms servers with traffic to disrupt services. *Example:* Using numerous bots to try and retrieve data from IRCTC website, thus crashing the servers and denying train ticket booking facility for numerous users.

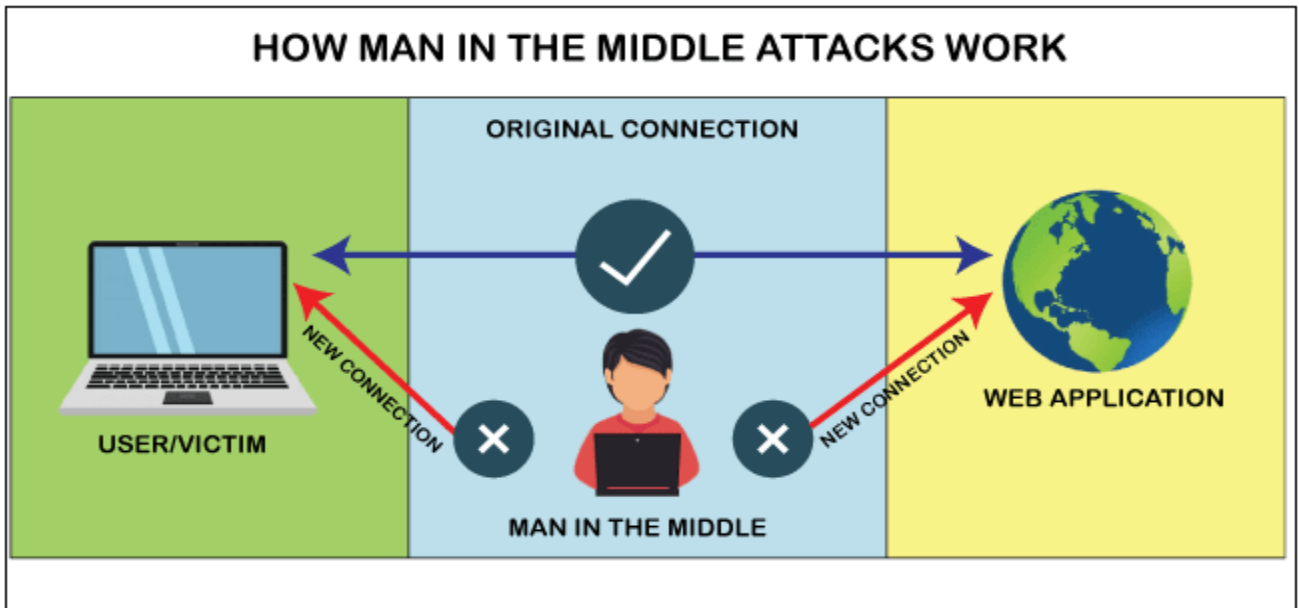
(g) **Man-in-the-Middle Attacks**. These attacks occur when an attacker secretly intercepts and potentially alters communication between two parties. *Example:* Intercepting data sent between your phone and an unsecured Wi-Fi network.

6. **Prime Targets**. Prime targets in mobile phones which a cyber-attacker targets are:-

(a) **Personal Information**. Mobile phones often store sensitive data like contact information, banking details, and passwords.

(b) **Applications**. Useful apps are replaced by malicious apps can steal data or infect your device.

- (c) **Location Tracking**. Many apps track your location, which can be exploited if privacy settings aren't properly managed.
- (d) **Camera/ Microphone**. Camera and microphone of the device are targeted and used to record private information without the knowledge of the device user.



PART III - HAZARDS OF PRIVACY BREACHES

7. Privacy breaches occur when personal information is accessed, stolen, or shared without consent. These can lead to serious consequences, including identity theft and fraud. Types of privacy breaches are:-

(a) **Data Theft**.

(i) **Definition**. Data theft occurs when hackers steal your personal information, such as your name, address, or bank account details. This can happen through phishing attacks, malware, or even physical theft of a device.

(ii) **Consequences of Data Theft**. If someone gains access to your personal data, they can impersonate you, make unauthorized purchases, or access your accounts.

(b) **Identity Fraud**.

(i) **Definition**. Identity fraud happens when criminals use stolen personal information to commit crimes like opening credit accounts, making fraudulent purchases, or applying for loans in your name.

(ii) **How to Protect Against Identity Fraud**. Monitor your bank statement, credit card statement and credit report regularly for unusual activity. Use strong, unique passwords for online accounts. Report lost or stolen devices to authorities immediately.



8. How Privacy Breaches Happen.

(a) Unsecured Wi-Fi Networks.

Connecting to public Wi-Fi without protection can expose your data to hackers.

(b) Weak Passwords. Easy-to-guess passwords make it easier for attackers to gain access to accounts and devices.

(c) Social Media. Posting too much personal information online can be exploited by cybercriminals.

TIPS FOR LIMITING SCREEN TIME

- Set specific screen time limits
- Use screen time tracking apps or monitor manually
- Create tech-free zones at home
- Schedule regular breaks

PART IV : DEVELOPING PROCESSES TO PROTECT NETWORKS, DEVICES, PROGRAMS AND DATA

9. To secure devices and networks effectively, it's important to follow a structured approach. Here are key practices that can help keep data and systems safe:-

(a) Secure Your Home Network.

(i) Change Default Router Passwords. Most routers come with default passwords, which can be easily found online. Change your router's password to something unique and not easily guessable.

(ii) Use Strong Wi-Fi Encryption. Enable WPA3 encryption on your router. This secures your Wi-Fi network from unauthorised access.

(iii) Enable a Guest Network. If you have visitors, set up a separate password protected network for them to use. This keeps your main network more secure.

(iv) Monitor Connected Devices. Check regularly which devices are connected to your home network to spot any unauthorised ones.

(b) Secure Your Accounts.

(i) Use Unique Passwords for Each Account. Avoid using the same password for multiple accounts. If one account gets hacked, others remain secure.

(ii) Be Cautious with Email Links. Cybercriminals often send fake emails that look real. Don't click on links or download attachments from unfamiliar senders.

(iii) Secure Social Media Accounts. Set your social media accounts to private, and only accept friend requests from people you know personally.



(c) **Network Security for Schools or Communities.**

(i) **Firewalls.** Firewalls monitor and control incoming and outgoing network traffic. Schools and workplaces typically use firewalls to block malicious activity.

(ii) **VPNs (Virtual Private Networks).** Virtual Private Networks or VPNs are useful to hide your location/ network details when used as part of a home, office or college network. These deny a cyber-criminal vital information which the criminal can use to mount attacks on our networks.

(iii) **Secure File Sharing.** Use trusted platforms for sharing school documents or personal files. Avoid sharing sensitive information over unsecured platforms.

10. **Protecting Data.** These days, even regular users of the Internet store data on multiple platforms. It is very important to secure this data. Some important methods are given below:-

(a) **Cloud Storage.**

(i) **Enable Encryption.** Ensure that your cloud service provider uses end-to-end encryption to secure your files during transit and storage.

(ii) **Use Strong Authentication.** Set up Two-Factor Authentication (2FA) for cloud accounts to add an extra layer of protection.

(iii) **Monitor Access Logs.** Regularly review who has access to your files and revoke permissions for unauthorized users.

(b) **Local Storage Devices.**

(i) **Encrypt Your Drives.** Use built-in tools like BitLocker (Windows) or FileVault (Mac) to encrypt data stored on hard drives or USBs.

(ii) **Backup Regularly.** Store copies of important data in a secure location to prevent loss from hardware failures or theft.

(iii) **Secure Physical Devices.** Keep storage devices locked away and password-protected to prevent unauthorized access.

(c) **Email Storage.**

(i) **Avoid Storing Sensitive Data.** Do not use email as a storage medium for critical or sensitive information.

(ii) **Enable Secure Email Protocols.** Use encrypted email services and protocols like TLS or PGP for secure communication.



- (iii) **Regularly Delete Old Emails.** Clear out emails that are no longer needed to reduce potential risks.

PART V : PRACTICAL STEPS TO MINIMISE DIGITAL THREATS

11. Your online privacy is in your hands. By managing privacy settings across your devices and apps, you can limit the amount of personal information shared. Some steps to manage privacy settings are:-

- (a) **Review App Permissions.** Apps often request access to things like your camera, microphone, and location. Be sure to grant access only when necessary.
- (b) **Control Location Settings.** Disable location tracking for apps that don't need it. Limit location sharing on social media platforms.
- (c) **Review Social Media Privacy Settings.** Set your social media accounts to private, only allowing friends or followers you know to view your posts.
- (d) **Be Mindful of Personal Information.** Avoid sharing sensitive details like your full name, phone number, or home address online unless it's necessary.

12. Following are some practical steps to minimise your risk:-

- (a) **Think Before You Click.** Be cautious of links in emails, texts, or on websites. Don't click on anything you weren't expecting.
- (b) **Use Secure Connections.** When browsing the internet, ensure the website starts with "https" rather than just "http," as the "s" indicates a secure connection.
- (c) **Don't Share Personal Information Over Public Wi-Fi.** Avoid entering sensitive information like passwords or credit card numbers while connected to public Wi-Fi networks.
- (d) **Secure Your Devices.** Always lock your phone, tablet, or computer with a PIN, password, or fingerprint. Don't leave devices unattended in public places.
- (e) **Install Anti-virus and Anti-malware Software.** Protect your devices by installing reputable security software that can detect and block threats.
- (f) **Educate Yourself and Stay Informed.** Cybersecurity is constantly evolving. Stay informed about the latest threats and security practices.



CONCLUSION

13. Cyber and mobile security awareness is crucial for protecting your personal data and staying safe in the digital world. By following the practices outlined in this chapter - securing your devices, understanding threats, managing privacy settings, and taking practical steps to protect yourself - you can minimize the risks associated with technology and keep your online life safe. Stay alert, stay informed, and always take proactive steps to safeguard your personal information and digital presence.

SUMMARY

- Protecting devices, networks, and data from cyber threats like hacking, viruses, and unauthorized access is essential for digital safety.
- Use strong passwords, enable two-factor authentication, install security software, and update your devices regularly to guard against threats.
- Set up strong Wi-Fi encryption, change router passwords, and monitor connected devices to protect your home network.
- Be aware of phishing, malware, spyware, ransomware, and man-in-the-middle attacks, which can target personal information or damage devices.
- Continuously learn about new cybersecurity threats and practices to stay up-to-date and protect your online presence effectively.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is one of the most effective ways to protect your online accounts?

- (a) Same password for all accounts
- (b) Share password with friends for easy access
- (c) Enable two-factor authentication (2FA)
- (d) Avoid using passwords altogether

Q2. What is phishing?

- (a) A type of virus that infects your device
- (b) A fraudulent attempt to steal personal information via email or messages
- (c) A program that protects your device from malware
- (d) A method of encrypting your Wi-Fi network

Q3. Which of the following is a good practice for protecting your devices from cyber threats?

- (a) Always leave your device unlocked for easy access
- (b) Use weak passwords for convenience
- (c) Regularly update your software and security programs
- (d) Disable all security features to improve device performance

Q4. What is one way to protect your privacy when using social media?

- (a) Share your location on all posts
- (b) Set your profile to private and only accept friend requests from people you know
- (c) Use your full name and contact information in public posts
- (d) Post about your vacation plans in real-time

Q5. What should you do to avoid data theft when using public Wi-Fi?

- (a) Enter sensitive information like passwords and credit card numbers
- (b) Use a Virtual Private Network (VPN) for secure browsing
- (c) Disable Wi-Fi completely
- (d) Share your Wi-Fi connection with strangers

Q6. What does Spyware do?

- (a) Secretly collects information about you
- (b) Helps national security agency in covert operations
- (c) Steals Crypto Currency



- (d) Secures Wi-Fi networks

Q7. What does Adware do?

- (a) A type of virus that infects your device
- (b) Bombards users with unnecessary advertisements
- (c) A program that protects your device from malware
- (d) A method of encrypting your Wi-Fi network

Q8. Which of the following is a good practice for securing your data on email?

- (a) Always leave your device unlocked for easy access
- (b) Use weak passwords for convenience
- (c) Use 2FA (two factor authentication) for your account
- (d) Disable all security features to improve performance

Q9. What is one way to protect your data on the cloud?

- (a) Disable all security features to improve performance
- (b) Store your data in an encrypted form
- (c) Share your cloud credentials with your friends
- (d) Post public links for accessing your data

Q10. Which of these is the safest Wi-Fi network?

- (a) Airport Wi-Fi
- (b) Railway Station Wi-Fi
- (c) School Wi-Fi
- (d) Home Wi-Fi with WPA3 encryption

Q11. What does Malware do?

- (a) Resides in your device to cause harm to you
- (b) Shares password with friends for easy access
- (c) Secures Cloud storage
- (d) Shares your location with multiple users

Q12. What type of information is usually targeted in Phishing attacks?

- (a) Banking credentials
- (b) Date of birth
- (c) Aadhaar number
- (d) Email ID

Q13. What is a good period for reviewing your app privacy settings?

- (a) Once a month
- (b) Never
- (c) Once a year
- (d) Only when you install the app

**Q14. What is Data Theft?**

- (a) Stealing of your hard disk/ pen drive
- (b) Attack on Data Centres
- (c) Hackers stealing your personal information
- (d) Spying on Social Media accounts

Q15. What is Identity Fraud?

- (a) Impersonation of a person in cyberspace
- (b) Stealing identity cards
- (c) Attack on Aadhaar centres
- (d) Hacking of Wi-Fi networks

Short Answer Questions

- Q1. What is Two-Factor Authentication (2FA), and why is it important?
- Q2. Name two common types of cyber threats that can target mobile devices.
- Q3. What is the purpose of a firewall in protecting a network?
- Q4. How can strong passwords help protect your online accounts?
- Q5. What should you do if you lose your device or it gets stolen?

Long Answer Questions

- Q1 Explain how phishing works and what steps you can take to protect yourself from phishing attacks.
- Q2 Describe the different types of malware (such as viruses, ransomware, and spyware) and their potential impact on devices and data.
- Q3 Discuss the significance of managing privacy settings on your social media accounts and apps. What specific actions can you take to protect your personal information online?
- Q4 Why is it important to regularly update your software and security programs? Explain how updates can help protect your devices from cyber threats.
- Q5 What are some risks associated with using public Wi-Fi networks, and how can you secure your connection when using them?

CYBER SCIENCE (JD/JW)

CHAPTER CS II : VARIOUS SOCIAL MEDIA PLATFORMS - CONCERNS/ VULNERABILITIES



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture and Practice
Year	:	1st Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/ Lesson Plan; OHP with Presentation; Simulated Scenarios on Social Media Security Incidents; Peer Reviewing Feedback on Social Media Setups.

Time Plan

• Introduction	:	05 Mins
• Part I	:	06 Mins
• Part II	:	06 Mins
• Part III	:	10 Mins
• Part IV	:	08 Mins
• Conclusion	:	05 Mins



INTRODUCTION

1. **What is Social Media.** Platforms that allow users to connect, communicate, and share content online are called Social Media Platforms. Examples: WhatsApp, Instagram, Facebook, YouTube, Snapchat, Twitter, Telegram.
2. **Why Do We Use Social Media.**
 - (a) **Communication.** Staying in touch with friends and family.
 - (b) **Learning and Creativity.** Exploring ideas, tutorials, and content.
 - (c) **Entertainment.** Watching videos, playing games, and following trends.



LEARNING OBJECTIVES

- Basic understanding of social media platforms
- Basic knowledge of privacy and other security controls on social media platforms
- Types of cyber attacks / scams/ malicious schemes undertaken on social media platforms

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Configuring Privacy Controls
- (b) Part II : Managing Sensitive Information
- (c) Part III : Social Media Scams and Phishing Schemes
- (d) Part IV : Common Vulnerabilities in Social Media Platforms

INTERESTING FACTS

- Six Degrees, launched in 1997, is often regarded as the first social media site. The evolution of online services progressed from serving as channels for networked communication to becoming interactive platforms over time.
- India banned TikTok in June 2020 due to national security data privacy concerns, becoming the first major country to do so.



PART I : CONFIGURING PRIVACY CONTROLS

3. **Why are Privacy Controls Important.** Without proper privacy settings, your data may be exposed to strangers, increasing the risk of identity theft or misuse. Privacy controls allow you to manage the following:-

- (a) Who can see your posts and profile.
- (b) Who can contact you or send friend requests.
- (c) Who can access your personal information.

4. **Key Privacy Settings.**

(a) **Profile Visibility.**

- (i) Public: Everyone can view your posts and information.
- (ii) Private: Only approved followers can see your activity.
- (iii) Example: On Instagram, enable private mode via Settings > Privacy > Account Privacy.

(b) **Post Visibility.**

- (i) Limit the audience for each post (e.g., "Friends Only" on Facebook).
- (ii) Customise visibility on WhatsApp for status updates (Settings > Privacy > Status).

(c) **Control Friend Requests.**

- (i) Change who can send you requests (e.g., "Friends of Friends" on Facebook).
- (ii) Block or remove unknown followers.

5. **Steps to Configure Privacy Controls.**

(a) **Two-Factor Authentication (2FA).** Two-factor authentication is an additional layer of security requiring a one-time password (OTP) sent to your phone or email. It can be enabled through the security settings on apps like Instagram or Facebook by linking your phone number or email.

(b) **Limit Permissions for Third-Party Apps.** Avoid linking untrusted apps to your social media accounts. Periodically review apps with access to your account in Apps and Websites settings. These apps can access your personal data without your knowledge and considerable damage may be done by the time you realise their impact.



(c) **Tips for Regular Privacy Checks.** Review your settings every 2-3 months, this will allow you to modify your settings to any policy changes or new features made available by the social media platforms. Always check your login for unauthorised access.

PART II : MANAGING SENSITIVE INFORMATION

6. **What is Sensitive Information.** Sensitive information includes your personal details like full name, date of birth, address, phone number; financial information like bank details, credit card numbers, UPI IDs; account credentials like passwords, OTPs, security questions and information related to your school including your class, section, subjects and even the schedule of your school bus. All these information in the wrong hands can be used to conduct various frauds and crimes which we will see in subsequent parts of this chapter and in future chapters. Social Media platforms have become the ideal venue for various cyber criminals to access this sensitive information as these platforms are by default utilised by all of us to share personal information.

7. **Why Protect Sensitive Information.** Sharing sensitive data with the wrong person or leak of such information can lead to the following:-

- (a) **Identity Theft.** Hackers may use your details to impersonate you.
- (b) **Financial Fraud.** Misuse of banking or payment details to steal money from online accounts.
- (c) **Personal Risks.** Harassment or stalking due to exposed personal details. Attackers can target the individual whose information has been leaked by blackmailing them and stalk or harass others in their social circle. In either case the person whose information is leaked will undergo severe mental stress.

WHAT IS NATIONAL CYBER CRIME PORTAL.

- Any citizen can report a Cyber Crime against self or against any known person on the National Cyber Crime Portal by dialing 1930

HIGHER ORDER THINKING SKILLS (HOTS)

- Your parents have bought a smartphone for your younger sibling. She wants to install and use Facebook on it. What advice will you give her for safe usage of the app?



PART III : SOCIAL MEDIA SCAMS AND PHISHING SCHEMES

8. **Social Media Scams.** A social media scam is when someone pretends to be trustworthy to steal your information or money. There are various means which are adopted by the attackers to conduct these scams and their methods of operation and constantly changing and evolving. Scamming on Social Media platforms has become a cat and mouse game between the scammers, ordinary people and law enforcement authorities. Due to the prevalence of Social Media in present day, law enforcement authorities have limited resources to act against each and every scammer. It is in our own best interests to stay updated on the various scams and protect ourselves against the same.

9. **Common Social Media Scams.** Certain common scams on Social Media platforms are listed below:-

(a) **Fake Giveaways.**

- (i) You see a post saying, “Win a free iPhone! Click the link to claim your prize.”
- (ii) Reality: It’s a trap to steal your personal details.

(b) **Impersonation.**

- (i) A scammer pretends to be your friend or a celebrity.
- (ii) They might send messages asking for money or personal information.

(c) **Job or Scholarship Offers.**

- (i) Scammers promise high-paying jobs or scholarships and ask for upfront fees.
- (ii) Real companies or schools don’t ask for money to apply.

(d) **Phishing Links.**

- (i) Messages or posts have links that lead to fake websites.
- (ii) These websites can steal your passwords or personal data.

10. **How to Spot a Scam?** Some common ways to identify a scam are given below:-

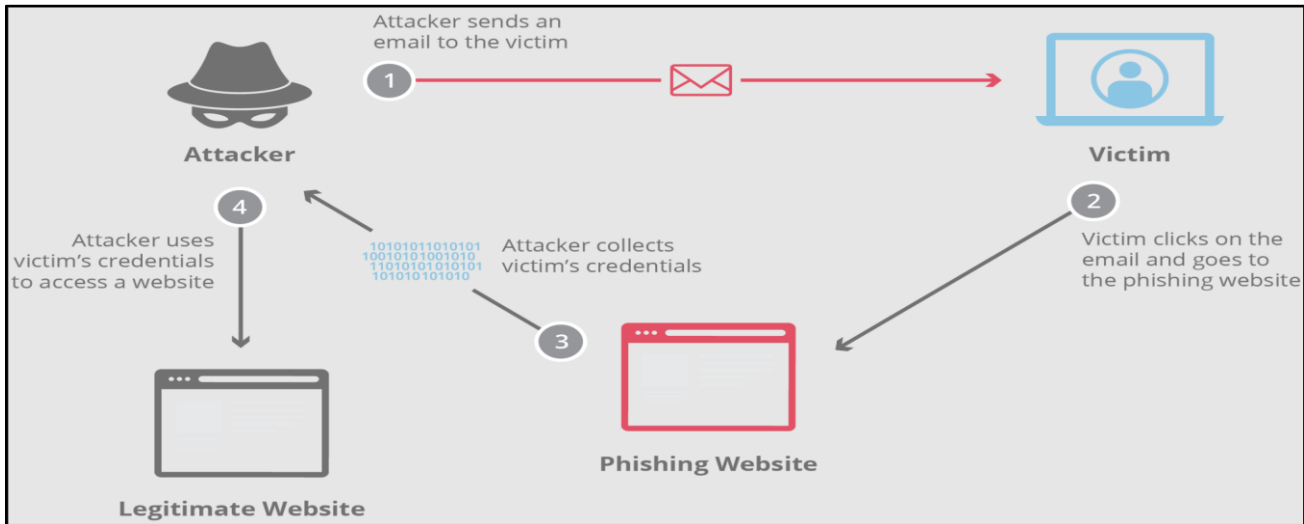
(a) **Too Good to Be True.** If it promises something amazing for free, it’s likely fake.

(b) **Urgent Language.** Messages that say, “Act now!” or “Your account will be locked” are often scams.

(c) **Suspicious Links.** Always check the URL before clicking. Fake websites look real but may have misspellings.

11. **What to Do if You Spot a Scam.** Follow these methods when you spot a scam:-

- (a) **Don't Click or Reply.** Ignore suspicious messages and links.
- (b) **Block and Report.** Use the platform's tools to block the scammer and report the account.
- (c) **Tell an Adult.** If you feel unsure, talk to your parents, teacher, or a trusted adult.



12. **What is Phishing.** Phishing is a type of scam where someone pretends to be trustworthy to trick you into sharing sensitive information like passwords, bank details, OTPs (One-Time Passwords), security codes of apps like Whatsapp etc. Scammers often use fake emails, messages, or websites that look real to deceive you.

13. **How Does Phishing Work.**

- (a) **Fake Emails or Messages.** You receive an email or message that looks like it's from a trusted company (like your bank or a social media platform). It might say, "Your account is at risk! Click here to fix it."
- (b) **Suspicious Links.** The email contains a link to a website. The website looks official but is designed to steal your login details.
- (c) **Urgent Warnings.** Phishing messages often say things like, "Act now, or your account will be deactivated." They create panic to make you act quickly without thinking.
- (d) **Attachments with Viruses.** Some phishing emails include files that, when opened, install viruses.

14. **How to Spot a Phishing Attempt.**

- (a) **Check the Sender.** Does the email address look odd? Scammers might use addresses like info@bank-secure123.com instead of a real company email.



- (b) **Look for Spelling Errors.** Phishing messages often have typos or bad grammar.
- (c) **Inspect Links.** Hover your mouse over the link (without clicking). If the URL looks strange or doesn't match the company's website, it's likely fake.
- (d) **Too Good to Be True.** If the message promises something amazing, like free money or prizes, be cautious.

15. **How to Protect Yourself from Phishing.**

- (a) **Think Before You Click.** Don't click on links in suspicious emails or messages.
- (b) **Verify the Source.** If you receive a message from your bank or a company, contact them directly using their official website or phone number.
- (c) **Don't Share Sensitive Information.** Never give out passwords, OTPs, or financial details over email or message.
- (d) **Enable Two-Factor Authentication (2FA).** This adds an extra layer of security to your accounts.
- (e) **Keep Your Device Updated.** Regular updates fix security issues that hackers might exploit.

16. **What to Do if You Fall for a Phishing Scam.**

- (a) **Change Your Passwords Immediately.** Use a strong and unique password.
- (b) **Report the Scam.** Inform your parents or teacher and report the phishing attempt to the platform or company.
- (c) **Check Your Accounts.** Look for unusual activity, like unknown transactions or logins.

PART IV : COMMON VULNERABILITIES IN SOCIAL MEDIA PLATFORMS

17. Social media platforms like Instagram, Facebook, WhatsApp, and Snapchat are fun and useful for connecting with friends and sharing experiences. However, they are not without risks. Hackers and scammers often take advantage of weaknesses, called **vulnerabilities**, to misuse your information or accounts. Knowing these vulnerabilities can help you stay safe. These vulnerabilities are highlighted in subsequent paragraphs.

18. **Weak Passwords.**

- (a) **What's the Problem?** Many people use simple passwords like "123456" or "password," making it easy for hackers to break into accounts.



(b) **Why is it Dangerous.** Hackers can access your personal messages, photos, and contacts and using this information, they can impersonate you to scam your friends.

(c) **How to Avoid This.** Use strong passwords with a mix of letters, numbers, and symbols. Never reuse the same password for multiple accounts.

19. **Data Breaches.**

(a) **What's the Problem.** Sometimes, social media platforms experience data breaches where hackers steal information from their databases.

(b) **Why is it Dangerous.** Sensitive information like email addresses, phone numbers, and passwords can be leaked and scammers may use this data for phishing attacks or identity theft.

(c) **How to Avoid This.** Enable **Two-Factor Authentication (2FA)** for extra account security and change your passwords regularly, especially if a platform reports a data breach.

20. **Fake Accounts and Impersonation.**

(a) **What's the Problem.** Scammers create fake profiles pretending to be someone else, like a celebrity, friend, or trusted company.

(b) **Why is it Dangerous.** These accounts may trick people into sharing personal details or money and using the same, the scammers can spread misinformation or harmful content.

(c) **How to Avoid This.** Only interact with verified accounts (look for blue checkmarks) and report and block fake profiles immediately.

<u>TIPS</u>
➤ Even if the message appears to be from a legitimate company, never click on links directly from the email. Instead, go to the official website of the organisation by typing the address into your browser manually.

21. **Untrusted Third-Party Apps.**

(a) **What's the Problem.** Some games, quizzes, or apps ask to connect to your social media accounts. They may request access to your data.

(b) **Why is it Dangerous.** Unsecured apps can misuse your data or act as a gateway for hackers and some apps share your information with advertisers without your consent.

(c) **How to Avoid This.** Only connect apps from trusted sources and regularly review and remove apps you no longer use from your account settings.



22. **Oversharing Personal Information.**

- (a) **What's the Problem.** Posting too much personal information, such as your school name, location, or daily routine, can expose you to risks.
- (b) **Why is it Dangerous.** Strangers can misuse this information for stalking or harassment. Hackers can use these details to guess your passwords or security answers.
- (c) **How to Avoid This.** Limit the personal details you share online and use privacy settings to control who can see your posts.

23. **Lack of Awareness about Updates.**

- (a) **What's the Problem.** Social media platforms often release updates to fix security vulnerabilities, but many users ignore them.
- (b) **Why is it Dangerous.** Older versions of apps may have weaknesses that hackers can exploit. Using outdated software can expose your account to cyberattacks.
- (c) **How to Avoid This.** Update your social media apps regularly. Turn on automatic updates to ensure you're always protected.





CONCLUSION

24. Social media platforms have become an essential part of our daily lives, offering opportunities to connect, share, and learn. However, with these benefits come significant concerns and vulnerabilities that users must navigate carefully. Issues such as privacy risks, phishing scams, data breaches, and the misuse of sensitive information highlight the importance of being cautious and informed while using these platforms. It is essential to understand how to configure privacy settings, recognise scams, and protect personal information to reduce the risks associated with social media use.

SUMMARY

- Configuring Privacy Controls on social media platforms are crucial for protecting personal information and maintaining security. Configuring these controls ensures that only trusted people can view or interact with your content.
- Managing Sensitive Information on social media is essential for protecting your privacy and security. Sensitive information includes details like your full name, address, phone number, email, financial data, and passwords.
- Social Media Scams and Phishing Schemes are deceptive tactics used by fraudsters to steal your money, personal information, or gain unauthorised access to your accounts. Various measures are available to protect ourselves from such issues.
- Common Vulnerabilities in Social Media Platforms can expose users to various risks. Common vulnerabilities include weak passwords, where users choose simple and easily guessable credentials.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the primary purpose of configuring privacy controls on social media?

- (a) To share more personal information
- (b) To make your profile visible to everyone
- (c) To limit who can see your posts and interact with you
- (d) To increase the number of followers

Q2. Which of the following is an example of sensitive information that should be managed carefully on social media?

- (a) Your favourite colour
- (b) Your phone number
- (c) The time you woke up
- (d) Your recent hobbies

Q3. What is two-factor authentication (2FA) used for?

- (a) To help you log in without a password
- (b) To prevent unauthorized access by requiring a second form of identification
- (c) To increase the number of followers
- (d) To change your account username

Q4. What should you do if you receive a message offering a "too good to be true" prize on social media?

- (a) Immediately click on the link to claim the prize
- (b) Report the message and delete it
- (c) Share the message with friends
- (d) Give your personal details to claim the prize

Q5. What is a common sign of a phishing scam?

- (a) The message includes an official logo
- (b) The message creates a sense of urgency and asks for personal information
- (c) The message is from a verified account
- (d) The message has no links or attachments

Q6. How can you protect your social media accounts from unauthorized access?

- (a) Use weak passwords
- (b) Share your password with friends
- (c) Regularly update your password and enable two-factor authentication
- (d) Post your password on your profile for easy access



Q7. What is the risk of sharing too much personal information on social media?

- (a) It makes your account more popular
- (b) It could lead to identity theft or harassment
- (c) It increases your social media followers
- (d) It helps companies advertise to you

Q8. Which of the following is an example of a vulnerability in social media platforms?

- (a) Strong passwords
- (b) Regularly updated software
- (c) Fake accounts impersonating real people
- (d) Having two -factor authentication enabled

Q9. What should you do if you suspect a social media account has been hacked?

- (a) Ignore the activity and continue using the account
- (b) Change your password immediately and report the issue to the platform
- (c) Share your new password with friends
- (d) Log out and stop using the platform permanently

Q10. What is the best way to prevent falling for a phishing scam?

- (a) Click on every link in the message to check if it's real
- (b) Verify the sender and check the URL before clicking any links
- (c) Share the link with friends to see if they recognize it
- (d) Ignore the message and move on

Q11. Which of these apps is safe to download/ install?

- (a) An app your friend gave you on a pen drive
- (b) An app whose link you found on an ad while streaming cricket
- (c) An app which downloaded automatically while downloading an ebook
- (d) An app available on Play Store & iOS App Store with more than 10000 reviews.

Q12. Which of the following is safe to share on social media with an unknown person?

- (a) Your home address
- (b) Your Aadhaar ID
- (c) Your parents' names
- (d) None of the above



Q13. Which of the following claims found in ads look legitimate?

- (a) Complete the survey to win \$10000
- (b) Click here to buy an iPhone for Rs5000
- (c) Click here to get a coupon code for 90% off on Amazon
- (d) None of the above

Q14. Which of the following is a good practice while using social media?

- (a) Accept all friend requests
- (b) Keep your post visibility to friends only
- (c) Keep your account public
- (d) Allow permissions to all third party apps

Q15. Why should you protect sensitive information on social media?

- (a) To safeguard from Identity Theft
- (b) To safeguard from Financial Fraud
- (c) To protect oneself from personal risks
- (d) All of the above

Short Answer Questions

- Q1. What is the purpose of privacy settings on social media?
- Q2. Why is it important to use strong, unique passwords for your social media accounts?
- Q3. What does two-factor authentication (2FA) do for your social media security?
- Q4. How can phishing scams affect social media users?
- Q5. What should you do if you receive a suspicious message asking for personal information on social media?

Long Answer Questions

- Q1. Explain the risks of oversharing personal information on social media and how it can impact your privacy.
- Q2. Describe the common vulnerabilities found in social media platforms, and suggest ways to protect your account from being hacked.
- Q3. How can you manage sensitive information on social media to avoid identity theft or fraud? Discuss specific actions you should take to keep your data safe.
- Q4. What are social media scams and phishing schemes? Provide examples of each, and explain how users can recognize and protect themselves from these threats.
- Q5. Discuss the role of third-party apps in social media security. How can they become a vulnerability and what steps can be taken to prevent the same.

CYBER SCIENCE (JD/JW)

CHAPTER CS III : POSTING ON SOCIAL MEDIA - RESPONSIBILITIES, IMPLICATIONS, AND LIABILITIES



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 1st Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/ Lesson Plan; OHP with Presentation; Simulated Scenarios on Social Media Security Incidents; Peer Reviewing Feedback on Social Media Setups.

Time Plan

- Introduction : 05 Mins
- Part I : 05 Mins
- Part II : 10 Mins
- Part III : 10 Mins
- Conclusion : 10 Mins



INTRODUCTION

1. Social media is an essential part of our daily lives, especially for students and young adults. From connecting with friends to sharing creative content, social media platforms allow us to express ourselves in many ways. However, it's crucial to remember that what we post online can have long-term consequences, both positive and negative. This chapter will explore the responsibilities that come with posting on social media, the potential impact of your posts, and how to interact safely.



LEARNING OBJECTIVES

- Basic understanding of content creation on social media platforms to include ethical & legal aspects
- Understanding the power of social media in shaping public opinion and on individual relations
- Acquiring tools/ resources to safely interact over social media

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Creating Content Responsibly
- (b) Part II : Impact of Social Media Posts
- (c) Part III: Interacting Safely on Social Media

INTERESTING FACTS

- The first SMS message was sent over the Vodafone GSM network in the United Kingdom on 3 December 1992, from Neil Papworth of Sema Group (now Mavenir Systems) using a personal computer to Richard Jarvis of Vodafone using an Orbitel 901 handset. The text of the message was "Merry Christmas."

PART I : CREATING CONTENT RESPONSIBLY

2. **Understanding the Power of Social Media.** Social media is one of the most powerful communication tools of the 21st century. With billions of users worldwide, it allows people to share ideas, experiences, and opinions instantly. But with great power comes great responsibility. Social media platforms provide an immediate way to communicate with a global audience, but once something is shared, it can be difficult or even impossible to erase completely. Subsequent paras will give you certain guidelines for posting on Social Media platforms.



3. **Think Before You Post.** Before you hit "post," ask yourself:-
 - (a) **Is it Respectful?** Think about the tone and content of your post. Does it show respect to others? Avoid posting things that can hurt or insult other people, such as offensive jokes, bullying comments, or disrespectful images.
 - (b) **Would I Say this in Person?** In the heat of the moment, it can be tempting to share something impulsively. However, remember that social media is public. Would you say the same thing face-to-face with someone? If not, then reconsider sharing it online.
 - (c) **Is it Accurate?** Misinformation spreads quickly on social media. It's crucial to fact-check any information you share, especially if it involves sensitive topics like health, politics, or public events. Posting unverified information can mislead others and cause harm.

4. **The Importance of Privacy.** Social media platforms often encourage sharing personal experiences and details about our lives, but this can be risky. Here are some steps to help safeguard your privacy:
 - (a) **Limit Personal Information.** Avoid sharing sensitive data like your phone number, home address, or personal identification numbers (PINs) online.
 - (b) **Think Before you Share Others' Information.** Posting about others without their permission—especially private details like their address, phone number, or personal situations—can violate their privacy.
 - (c) **Adjust your Privacy Settings.** Most social media platforms allow you to customise who can see your posts. Make sure your account is set to private, or limit access to people you trust.
 - (d) **Profile Visibility.** Ensure that your profile is visible only to your friends/ approved followers.
 - (e) **Post Visibility.** Limit the audience for each post (e.g., "Friends Only" on Facebook).
 - (f) **Control Friend Requests.** Change who can send you requests (e.g., "Friends of Friends" on Facebook).

5. **Copyright and Plagiarism.** Social media platforms make it easy to share content created by others, but it's important to remember that many pieces of content are

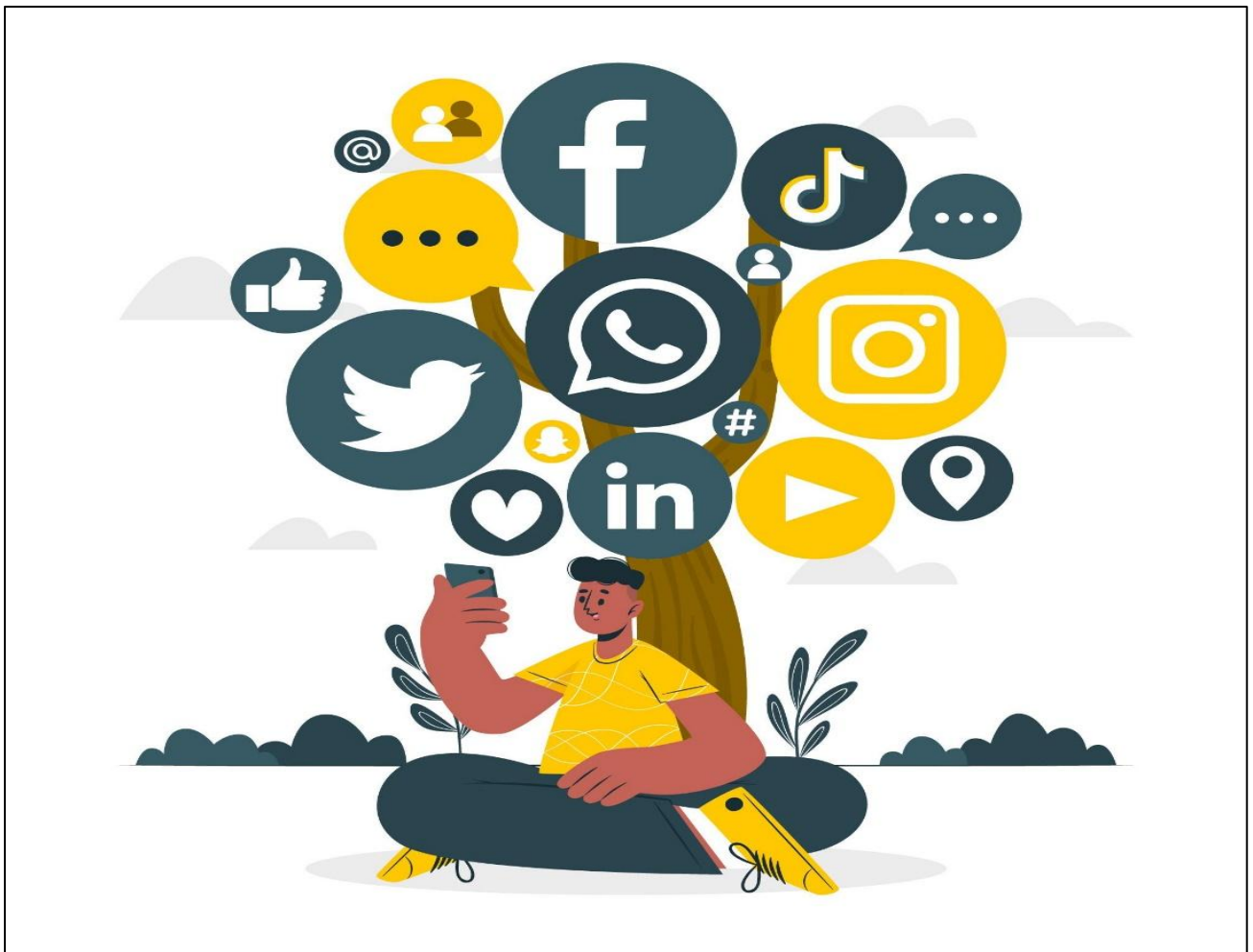
protected by copyright laws. Copyrighted material, such as images, videos, music, and text, cannot be used without permission unless it falls under fair use.

(a) **Respect Others' Intellectual Property.** Always give credit to the original creator if you're sharing someone else's work, whether it's a photo, video, or article.

(b) **Be Cautious About Plagiarism.** Never copy and paste someone else's words or ideas without citing the source. Plagiarism is not only unethical, but it can also have legal consequences.

INTERESTING FACTS

- The largest social media platform has over 300 crore monthly active users.





PART II : IMPACT OF SOCIAL MEDIA POSTS

6. **Positive Impacts of Social Media.** When used responsibly, social media can have a significant positive impact on individuals and communities. Using social media to spread positivity, share useful information, and raise awareness about important causes can help make the online world a better place for everyone. Here are some ways in which social media can contribute positively:-

(a) **Educational Opportunities.** Social media platforms are rich sources of educational content. From how-to videos to expert discussions, students and adults alike can learn new things through social media.

(b) **Promoting Social Change.** Social media is a powerful tool for raising awareness about social issues. Many campaigns for equality, climate change, and mental health have gained momentum through online platforms.

(c) **Building Communities.** Social media helps people connect with others who share similar interests, creating virtual communities that offer support, advice, and a sense of belonging.

7. **Negative Impacts of Social Media.** While social media offers many benefits, it also has its drawbacks. These are explained in detail in the next chapter. Careless or irresponsible posting can lead to negative consequences, such as:-

(a) **Cyberbullying.** The anonymity provided by social media can make it easier for individuals to engage in harmful behaviour, such as bullying or harassment. This can have severe emotional and psychological effects on the victim.

(b) **Reputation Damage.** Once a post is made public, it can be seen and shared by anyone. This includes colleges, or other individuals who might judge you based on what you've shared. A single inappropriate post could affect your future opportunities. Think carefully before sharing anything.

(c) **Mental Health Risks.** Constant exposure to idealised versions of others' lives can cause feelings of inadequacy or jealousy. Comparing yourself to others online can lead to issues like anxiety. Restrict social media usage on your own.

8. **The Long-Term Implications of Social Media Posts.** What you post online today can remain in the digital world for years to come. Even if you delete it, there's no guarantee that it's truly gone, as screenshots or shared copies may still exist. Here's why thinking long-term is essential:-

(a) **Career Implications.** Many companies and colleges search applicants' social media profiles as part of their decision-making process.



(b) **Long-lasting Effects**. While a post might seem harmless now, it could have a different impact later. What you post as a teenager might be seen in a different light when you are older and more mature.

9. **Social Media's Impact in Shaping Public Opinion**. Social media is a powerful tool for shaping public opinion, influencing how people think, feel, and act on various issues. However, this wide-reaching influence also means that misinformation and biased opinions can spread quickly. By critically assessing the information we see online and sharing only accurate, well-supported content, we can help prevent the spread of misinformation.

10. **Misinformation and Fake News**. The speed and reach of social media make it easy for misinformation and fake news to go viral. False stories & misleading headlines can quickly become viral and lead people to make decisions based on incorrect information. This highlights the importance of verifying information before sharing it.

11. **Positive Aspects**. On the positive side, social media has been instrumental in spreading awareness about important social issues, such as climate change, assistance during disasters etc. During natural calamities like floods, cyclones, earthquakes etc, social media platforms played an important role in tracing survivors and victims and helping families find their loved ones.

INTERESTING FACTS

- 7 out of 10 people world over use social media as one of their primary source of news

12. **Use of Social Media by Govt Agencies**. Indian govt agencies have been at the forefront in utilising social media to reach maximum number of our citizens and making them aware of various facilities, govt schemes and citizen rights. This has been possible mainly due to a high degree of digital literacy and availability of cost-effective internet plans in our country.

HIGHER ORDER THINKING SKILLS (HOTS)

- **What are the various aspects you will include in your school's Social Media usage advisory for students?**

PART III : INTERACTING SAFELY ON SOCIAL MEDIA

13. **Protecting Yourself and Others Online**. Maintaining your safety online should always be a priority when interacting on social media. Here are some key guidelines for staying safe:-

(a) **Keep Your Personal Information Private**. Avoid revealing sensitive details about yourself online, such as your exact location, financial details, or contact information. This reduces the risk of identity theft or other forms of exploitation.



(b) **Be Mindful of Who You Connect With.** Don't accept friend requests or follow individuals you don't know in real life. Fake accounts, bots, and online predators are a reality on social media, so always exercise caution.

(c) **Use Strong Privacy Settings.** Take advantage of the privacy settings offered by social media platforms. Make sure your accounts are set to private, or limit the audience of your posts to people you trust.

14. **Recognising and Avoiding Negative Interactions.** Sometimes, social media can lead to negative interactions, such as online arguments, bullying, or trolling. Here's how to avoid or handle such situations:-

(a) **Don't Engage in Arguments.** If you encounter negativity or aggression online, avoid responding to it. Arguing with trolls or online bullies often escalates the situation and can damage your reputation.

(b) **Report Harmful Content.** If you come across abusive content, bullying, or harassment, use the platform's reporting features to notify the authorities or platform administrators. Reporting helps ensure a safer environment for everyone.

(c) **Offer Support to Others.** If you see someone being targeted or bullied, offer your support in private and encourage

TIPS

- When you stop using a social networking profile or website, it's a good idea to deactivate or delete your account. This will mean the content is no longer live and should not be searchable online.

15. **Managing Digital Footprint.** Everything you post online contributes to your digital footprint. This includes your social media posts, comments, photos, and videos. A positive digital footprint can open doors for you, while a negative one can close them. Here are some ways to manage your digital footprint responsibly:-

(a) **Be Selective with What You Post.** Think before you share. Would you be proud of your posts in the future? If not, it's better not to share them.

(b) **Review Your Posts Periodically.** Go through your old posts from time to time to see if anything needs to be deleted or updated. This is especially important as you mature and change.

(c) **Think About the Future.** Consider how your online presence will be perceived by others, especially employers or college admissions officers, in the future.

16. **Understanding Online Etiquette.** Just like in real life, online interactions have a code of conduct. Practicing good online etiquette is important for building a respectful and positive social media environment:-



(a) **Be Polite and Respectful.** Treat others as you would like to be treated. Avoid using offensive language, insulting comments, or inflammatory statements.

(b) **Respect Differing Opinions.** Social media is a platform for a wide range of ideas and perspectives. Even if you disagree with someone, engage with them respectfully. Avoid personal attacks and instead focus on the issue at hand.

(c) **Give Credit Where it's Due.** If you share someone else's work, make sure to acknowledge them properly. This shows respect for their efforts and maintains transparency in your online interactions.

TIPS

- Never reveal information about your parents online as this may be used by hackers to target them.

CONCLUSION

17. **Posting on social media comes with significant responsibilities.** Whether you're creating content, interacting with others, or sharing information, it's essential to consider the impact your actions can have on yourself and those around you. By creating content responsibly, understanding the implications of your posts, and interacting safely, you can protect your privacy, maintain your reputation, and contribute positively to the online community. Social media can be a powerful tool for communication, creativity, and connection, but it's up to you to use it wisely and responsibly. Remember, once something is online, it's very hard to take back, so always think before you post.

SUMMARY

- Social media has become an essential part of our daily lives, offering a platform for communication, creativity, and connection.
- Creating Content Responsibly emphasizes the importance of thinking before posting. It is crucial to ensure that content is respectful, accurate, and mindful of privacy.
- The Impact of Social Media Posts includes both positive and negative consequences. Social media can foster educational opportunities, promote social change, and help build supportive communities. However, it can also lead to cyberbullying, reputational harm, and mental health issues, with the potential for a single post to affect one's future.
- Interacting Safely on Social Media focuses on protecting oneself online. This includes safeguarding personal information, using strong privacy settings, and avoiding negative interactions.

**ASSESSMENT EXERCISE****Multiple Choice Questions**

Q1. What is the primary purpose of configuring privacy controls on social media?

- (a) To share more personal information
- (b) To make your profile visible to everyone
- (c) To limit who can see your posts and interact with you
- (d) To increase the number of followers

Q2. Why is it important to think before posting on social media?

- (a) To avoid posting things that could harm others or yourself
- (b) To get more likes and comments
- (c) To increase your followers
- (d) To make your posts go viral

Q3. Which of the following is an example of responsible content sharing on social media?

- (a) Posting sensitive personal information
- (b) Sharing unverified news or rumours
- (c) Giving credit to the original creator of shared content
- (d) Ignoring privacy settings

Q4. What can be the consequence of posting inaccurate or unverified information on social media?

- (a) It can increase your followers
- (b) It can mislead others and cause harm
- (c) It can improve your reputation
- (d) It will make you popular

Q5. What should you avoid sharing on social media to protect your privacy?

- (a) Your favourite hobbies
- (b) Your personal address and phone number
- (c) Positive thoughts and quotes
- (d) Photos of your pets

Q6. How can social media posts negatively impact someone's future?

- (a) By improving their online reputation



- (b) By providing opportunities for online work
- (c) By affecting their college admissions or job opportunities
- (d) By helping them make more friends

Q7. What is the primary purpose of social media's role in shaping public opinion?

- (a) To entertain users
- (b) To influence people's views on important issues
- (c) To help people meet new friends
- (d) To create fake news and spread misinformation

Q8. Which of the following is a key factor in avoiding cyberbullying and online harassment?

- (a) Engaging in online arguments
- (b) Reporting harmful content and blocking abusers
- (c) Sharing everything you see on social media
- (d) Posting anonymously to avoid consequences

Q9. What is a "digital footprint" on social media?

- (a) The number of followers you have
- (b) The collection of your online activity and posts that leave a lasting impact
- (c) The privacy settings of your profile
- (d) The types of content you share publicly

Q10. What does practicing good online etiquette involve?

- (a) Posting as frequently as possible
- (b) Being rude and dismissive of others' opinions
- (c) Being polite, respectful, and acknowledging others' content
- (d) Posting only images of yourself

Q11. Why should you avoid sharing personal information online?

- (a) To make friends more easily
- (b) To protect yourself from identity theft and online predators
- (c) To show off your lifestyle
- (d) To gain more followers

Q12. What is an example of oversharing on social media?

- (a) Posting pictures of your school project
- (b) Sharing your full address, phone number, or daily schedule



- (c) Discussing your favourite hobbies
- (d) Commenting on your friend's vacation photos

Q13. What should you do if you see cyberbullying happening online?

- (a) Join in to protect yourself
- (b) Ignore it completely
- (c) Report it to a trusted adult or the platform's help centre
- (d) Share the bully's post to warn others

Q14. How can posting inappropriate content affect your future?

- (a) It won't have any impact at all
- (b) It could harm your reputation and future opportunities
- (c) It will automatically make you popular
- (d) It ensures you gain more followers

Q15. What is a good practice to follow when posting online?

- (a) Only think about the post's popularity
- (b) Consider how the post reflects on you and its impact on others
- (c) Post as quickly as possible without reviewing it
- (d) Avoid commenting on others' posts completely

Short Answer Questions

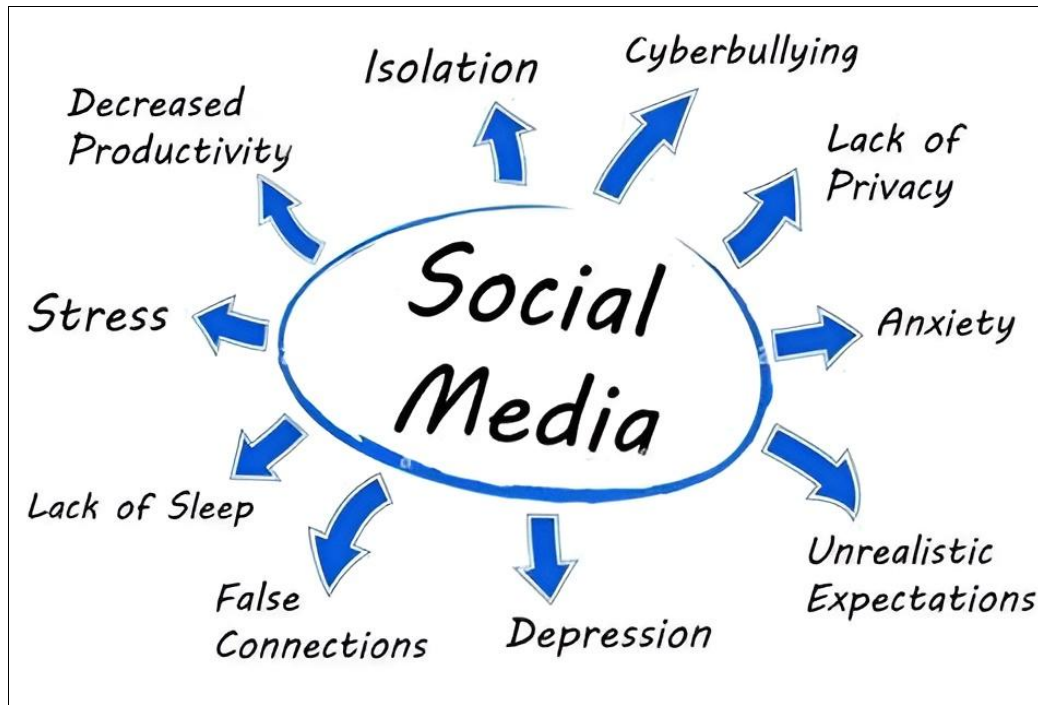
- Q1. Why is it important to configure privacy controls on social media?
- Q2. What is one key factor to consider before posting content on social media?
- Q3. What can happen if someone shares inaccurate information on social media?
- Q4. How does social media affect public opinion?
- Q5. What is a "digital footprint" and why is it important to manage it?

Long Answer Questions

- Q1. Explain how posting on social media can impact your reputation and future opportunities. Include examples of both positive and negative consequences.
- Q2. Discuss the importance of privacy settings and how they can protect your personal information on social media.
- Q3. Describe the potential negative effects of social media on mental health and how individuals can avoid them.
- Q4. Explain the role of social media in shaping public opinion, including how misinformation can spread and its impact on society.
- Q5. What are some best practices for interacting safely on social media, and why is it important to follow these practices?

CYBER SCIENCE (JD/JW)

CHAPTER CS IV : NEGATIVE IMPACT OF SOCIAL MEDIA & CYBER CRIMES



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 2nd Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/Lesson Plan, Simulated Scenarios - Cdts to Respond to Social Media Security Incidents, Peer Reviewing Feedback on Social Media Setups.

- Introduction : 05 Mins
- Part I : 15 Mins
- Part II : 15 Mins
- Conclusion : 05 Mins



INTRODUCTION

1. Benefits of Social Media are undeniable, but it is important to recognise the darker side of social media. The widespread use of these platforms has also led to various negative consequences, ranging from mental health issues to online criminal activities. Cyber-crimes, such as cyberbullying, cyberstalking, frauds, and honey trapping, have become prevalent, affecting people worldwide. In this chapter, we will explore the negative impacts of social media, focusing on mental health, privacy, and the dangers of online criminal activities, including cyberbullying, cyberstalking, cyber frauds, and honey traps.



LEARNING OBJECTIVES

- Understand that use of social media can have a negative impact
- Understand common cyber crimes against children & youth - cyber bullying & cyber stalking and methods to combat them
- Basic understanding of cyber frauds and honey trapping

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Negative Impact of Social Media
- (b) Part II : Cyber Crimes

TIPS

- Never feel shy to report any issue you are facing on social media to your parents or teachers.
- Encourage your friends who share such information with you to approach their parents or your teachers. Hesitation and delay can lead to the issue getting worse.

PART I : NEGATIVE IMPACT OF SOCIAL MEDIA

2. **Mental Health Issues.** Social media has a significant impact on mental health, especially among young users. While these platforms allow people to stay connected and entertained, they also expose individuals to risks such as anxiety, depression, and loneliness. Some examples are as below:-

- (a) **Social Comparison and Unrealistic Standards.** Users often share photos and posts that highlight the best aspects of their lives—vacations, achievements, or special moments. This creates an unrealistic image of life, leading others to feel inadequate or left out.



- (b) **Cyberbullying and Harassment.** Social media also provides a platform for bullying and harassment. The anonymity of online interactions makes it easier for people to post harmful content without fear of facing consequences. Cyberbullying can take many forms, including mean comments, spreading rumours, or public humiliation.
- (c) **Body Image Issues.** Constant exposure to “perfect” images of people on social media can contribute to unhealthy body image issues. This can lead to low self-esteem, eating disorders, and mental health challenges.
3. **Addiction and Time Wastage.** Social media can be highly addictive. The constant notifications, likes, and updates can lead to people spending large amounts of time. Some of these negative impacts are as below:-
- (a) **Impact on Productivity.** Students find it hard to focus on their studies due to the temptation of checking social media. The constant desire to check updates or respond to messages can result in procrastination, negatively impacting academic performance and overall productivity.
- (b) **Disrupted Sleep Patterns.** Excessive use of social media, particularly late at night, can interfere with sleep. The blue light emitted from screens inhibits the production of melatonin, the hormone responsible for regulating sleep. This can result in sleep deprivation.
- (c) **Decreased Face-to-Face Interaction.** When individuals spend too much time on social media, they may begin to neglect face-to-face relationships, leading to social isolation.
4. **Privacy Concerns.** A major issue that comes with social media is the loss of privacy. Social media encourages users to share personal details, including their location, daily activities, and even private thoughts. Unfortunately, this constant sharing increases the risk of privacy violations.
- (a) **Data Mining and Targeted Ads.** Social media platforms track users’ activities and gather data to build detailed profiles. This information is often sold to advertisers. This invasion of privacy is a major concern for users.
- (b) **Identity Theft and Hacking.** Users who share sensitive personal information on social media are vulnerable to identity theft. Hackers may steal login details or use social media profiles to impersonate others for financial gain.
- (c) **Location Sharing.** Many people post photos with geotags or location information, revealing their whereabouts in real-time. This information can be misused by criminals to track the user’s movements or even locate their home.
5. **Spread of Misinformation.** Another negative impact of social media is the rapid spread of misinformation. Platforms like Facebook and Twitter allow anyone to share information, regardless of its accuracy, which can lead to false or misleading stories going viral.



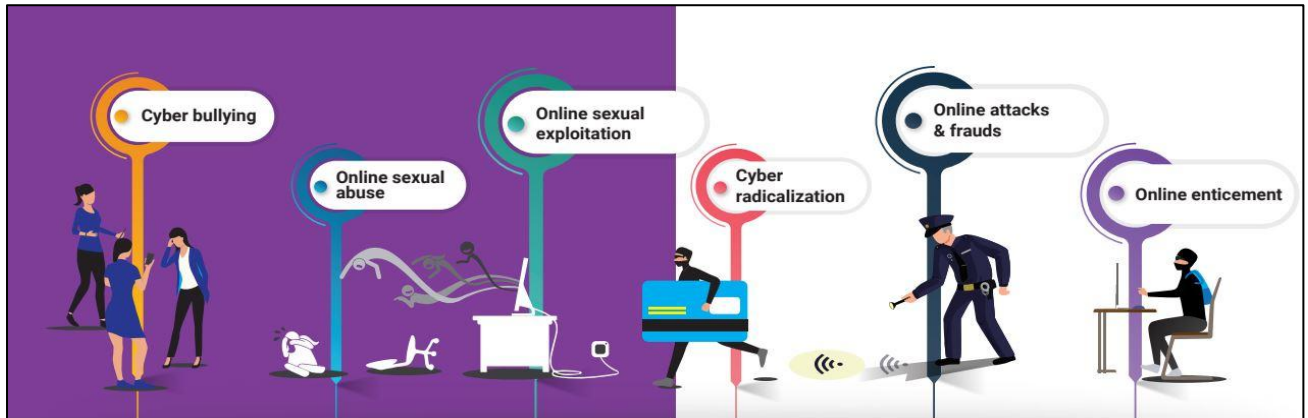
- (a) **Fake News.** Misinformation can be spread deliberately or accidentally through posts, articles, or videos. Fake news, such as those about health trends, can easily become viral and negatively impact people.
- (b) **Rumours and Hoaxes.** Many social media users are quick to share rumours or hoaxes without verifying the information. This can cause panic, confusion, or even harm to innocent people.



PART II : CYBER CRIMES

6. **Cyberbullying.** Cyberbullying refers to the use of digital platforms, like social media, to bully or harass others. Unlike traditional bullying, cyberbullying can happen at any time and is not limited to a specific location.
- (a) **Types of Cyberbullying.** Cyberbullying includes activities such as sending threatening messages, spreading rumours, posting hurtful comments, or sharing embarrassing images or videos without consent. These actions can cause emotional harm and have real-world consequences.
- (b) **Impact of Cyberbullying.** Victims of cyberbullying may experience anxiety, depression, and feelings of hopelessness. The emotional toll can lead to long-term mental health problems, including suicidal thoughts.
- (c) **How to Combat Cyberbullying.** Schools, parents, and social media platforms play a vital role in combating cyberbullying. Reporting abusive behaviour, blocking bullies, and providing emotional support to victims are essential steps of cyberbullying.
7. **Cyberstalking.** Cyberstalking involves the use of the internet, social media, and other digital tools to stalk or harass someone. Unlike general harassment, cyberstalking is persistent, and can involve threats or attempts to control the victim's online life.
- (a) **How Cyberstalking Works.** Cyberstalkers use social media to monitor their victim's activities, such as checking posts, photos, or locations. The goal of a cyberstalker is often to instil fear or maintain control over the victim.

- (b) **Consequences of Cyberstalking.** Victims of cyberstalking often experience extreme stress, anxiety, and a constant sense of danger.
- (c) **Preventing Cyberstalking.** The best way to prevent cyberstalking is by maintaining strict privacy settings, blocking unwanted contacts, and reporting suspicious activity. If ever you feel unsafe approach your parents immediately.



8. **Cyber Frauds.** Cyber frauds are crimes that involve the use of the internet to deceive individuals for financial gain. The internet has made it easier for criminals to scam people by offering fake services, products, or investment opportunities.

(a) **Types of Cyber Frauds.**

(i) **Phishing.** Phishing is a type of fraud where cybercriminals impersonate legitimate organizations and steal sensitive information.

(ii) **Online Shopping Scams.** Fraudsters create fake online stores or auction sites to trick people into buying non-existent products. Once payment is made, the goods are never delivered.

TIPS

- You can call the National Child Helpline, 24x7 by dialing 1098 to report any incident.

(b) **Impact of Cyber Frauds.** Victims of cyber frauds can suffer significant financial losses and emotional distress.

(c) **How to Protect Against Cyber Fraud.** To prevent cyber frauds, users should be cautious when sharing personal information online. They should only trust secure websites (look for “https” in the URL) and avoid clicking on suspicious links.

9. **Honey Trapping.** Honey trapping is a form of online deception in which criminals lure victims into fake romantic relationships with the intent of exploiting them financially or blackmailing them.



- (a) **How Honey Trapping Works.** Cybercriminals create fake online profiles, often portraying themselves as attractive, romantic individuals. After building trust with the victim, they may request intimate photos or videos. Once they have this material, they may use it to blackmail the victim for money or other favours.
- (b) **Impact of Honey Trapping.** Victims of honey trapping may face significant emotional distress, public humiliation, and financial loss.
- (c) **Preventing Honey Trapping.** To avoid honey trapping, individuals should be cautious when forming relationships with people they meet online. Sharing intimate content with strangers is never a good idea.

CONCLUSION

10. Social media has undeniably revolutionised the way we communicate, share experiences, and connect with others. However, it is crucial to acknowledge the negative impact of social media, which includes mental health issues, privacy concerns, and the rise of cyber-crimes. Cyberbullying, cyberstalking, frauds, and honey trapping are just a few of the dangers that users face in the digital world.

SUMMARY

- Social media has transformed how we connect, share, and communicate, offering countless benefits.
- However, its misuse and overuse have led to negative impacts on mental health, privacy, and safety, as well as an alarming rise in cyber crimes.
- Social media often fosters unhealthy comparisons, exposing users to idealised versions of life that can result in feelings of inadequacy, anxiety, and depression.
- Cyberbullying, Cyberstalking, Cyber Frauds and Honey Trapping are some of the cyber crimes being perpetrated on Social Media and we have to educate ourselves to safeguard against these.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is one of the main reasons social media negatively impacts mental health?

- (a) It promotes better communication skills
- (b) It encourages social comparison and unrealistic standards
- (c) It provides too much entertainment
- (d) It helps people focus more on their studies

Q2. How does social media addiction affect productivity?

- (a) It improves multitasking skills
- (b) It increases focus and concentration
- (c) It leads to procrastination and time wastage
- (d) It encourages users to take frequent breaks

Q3. Why is sharing location information on social media risky?

- (a) It helps advertisers send better ads
- (b) It can expose users to physical dangers such as stalking or theft
- (c) It saves storage space on devices
- (d) It makes travel posts more appealing

Q4. What is the primary danger of misinformation on social media?

- (a) It promotes learning about new trends
- (b) It creates opportunities for debate
- (c) It spreads false information, leading to panic or harm
- (d) It helps connect people with similar beliefs

Q5. Which of these actions is not cyberbullying?

- (a) Harmless jokes shared among friends online
- (b) Using social media to insult others
- (c) Using social media to harass others
- (d) Using social media to intimidate others

Q6. Which of the following is a common tactic in phishing scams?

- (a) Sending emails with fake links to steal personal data
- (b) Selling legitimate products at low prices



- (c) Offering free online courses
- (d) Creating posts to gain followers

Q7. What is the best way to protect against cyber fraud?

- (a) Avoid using social media completely
- (b) Share personal details only with trusted friends online
- (c) Verify sources and use secure websites before sharing information
- (d) Always click on links from unknown sources

Q8. How does honey trapping work?

- (a) By building fake online relationships to exploit victims
- (b) By spreading false news to gain attention
- (c) By sharing financial tips online
- (d) By promoting real products through social media

Q9. What is the key impact of cyberstalking on victims?

- (a) It encourages victims to be more active online
- (b) It builds their confidence in digital security
- (c) It creates fear, anxiety, and stress
- (d) It helps them meet new people

Q10. How can users prevent the negative impacts of social media?

- (a) By sharing all personal updates to increase transparency
- (b) By being mindful of the content they post and protecting their privacy
- (c) By spending more time on social media to build strong connections
- (d) By ignoring security settings and focusing on interaction

Q11. What is cyberbullying?

- (a) Complimenting someone online
- (b) Sending kind messages to friends
- (c) Using the internet to harm or intimidate others repeatedly
- (d) Ignoring online messages

Q12. What should you do if someone is cyberstalking you?

- (a) Respond to them politely
- (b) Block them and report the behaviour to an adult or authorities
- (c) Share your personal information to make peace



- (d) Post about them on your social media

Q13. What is honey trapping?

- (a) A way to protect your online accounts
 (b) A scam where someone pretends to form a relationship to deceive or harm you
 (c) Sending compliments to someone online
 (d) Sharing educational posts about safety

Q14. How can you avoid falling victim to cyberbullying?

- (a) Ignore your privacy settings
 (b) Share personal details publicly
 (c) Use strong privacy settings and avoid engaging with harmful messages
 (d) Respond to bullies immediately

Q15. What is the first thing to do if you suspect cyberbullying or honey trapping?

- (a) Stay silent and delete your account
 (b) Report the behaviour to a trusted adult or platform help centre
 (c) Publicly confront the person
 (d) Ignore the situation completely







Short Answer Questions

- Q1. What is the primary reason social media can negatively impact mental health?
 Q2. How can social media addiction affect a student's productivity?
 Q3. What is phishing, and how does it relate to cyber fraud?
 Q4. Name two ways users can protect themselves from cyberstalking.
 Q5. Why is misinformation on social media dangerous?

Long Answer Questions

- Q1. Explain the impact of social media on mental health, focusing on social comparison and body image issues.
 Q2. Discuss the various privacy concerns associated with social media and suggest ways users can protect their personal information.
 Q3. Describe the types of cyber fraud, including phishing and online shopping scams, and provide strategies to avoid them.
 Q4. What is honey trapping, and how can users protect themselves from it?
 Q5. Analyse the effects of cyberbullying and propose solutions to combat it in schools and online communities.

CYBER SCIENCE (JD/JW)CHAPTER CS V : DOS AND DONTS OF CYBER & SOCIAL MEDIA HYGIENE

CYBER & SOCIAL MEDIA HYGIENE: DO'S AND DON'TS	
<p>DO'S</p>  <p>STRONG PASSWORDS</p>  <p>VERIFY INFORMATION</p>  <p>DATA BACKUP</p>	<p>DON'TS</p>  <p>WEAK PASSWORDS</p>  <p>OVERSHARING PERSONAL INFORMATION</p>  <p>PUBLIC WI-FI WITHOUT VPN</p>

TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 2nd Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/ Lesson plan, Step-by-Step Check Lists for Secure Cyber & Mobile Use; Activities to Practice Identifying and Correcting Security Mistakes & Easy to Read Sheets on Do's & Don'ts.

Time Plan

- Introduction : 05 Mins
- Part I : 06 Mins
- Part II : 06 Mins
- Part III : 06 Mins
- Part IV : 06 Mins
- Part V : 06 Mins
- Conclusion : 05 Mins



INTRODUCTION

1. The digital world is an exciting place, offering opportunities to learn, connect, and share experiences. However, it also requires us to be cautious, respectful, and responsible. This chapter will guide you through five key areas of online behavior to ensure you maintain good cyber and social media hygiene. By following these principles, you can protect your privacy, contribute positively to online communities, and avoid falling prey to digital threats.



LEARNING OBJECTIVES

- Learning about safety-enabling privacy settings
- Distinguishing between authentic and fake information
- Learn practical tips for protecting one's social media presence and digital devices

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Comprehending Privacy Settings
- (b) Part II : Evaluating and Disseminating Information
- (c) Part III : Fostering Respectful Online Conduct
- (d) Part IV : Identifying and Evading Scams
- (e) Part V : Reporting and Addressing Misuse

DID YOU KNOW?

- Digital health and wellness is the ability to use technology like mobile phones & laptops in a useful way without letting it impact your mental and physical health.
- Over 4.7 billion people now use social media – meaning more than half the planet is scrolling everyday.
- Two of the most overlooked cyber security threats include Bluetooth devices and cloud security failures



PART I : COMPREHENDING PRIVACY SETTINGS

2. Privacy settings are your first line of defence online. They help you control who can see your posts, access your personal information, and interact with you.

3. **Dos.**

(a) Regularly review and update your privacy settings on all social media platforms. Set your accounts to private so only approved followers or friends can see your content.

(b) Always use strong, unique passwords, and consider enabling two-factor authentication to add an extra layer of security.

(c) Limit the personal details you share online. For example, avoid posting your home address, school name, or daily routines. Information like this can make you vulnerable to unwanted attention or scams.

(d) Use Incognito Mode or Private Browsing for sensitive searches to prevent data tracking.

(e) Limit Location Sharing to trusted apps only, and turn it off for social media unless necessary.

(f) Enable Login Alerts to receive notifications about unusual activity on your account.

4. **Don'ts.**

(a) Accept friend requests or follow requests from people you don't know in real life. Strangers might not always have good intentions.

(b) Assume that the default privacy settings on an app are secure. Always customize them to suit your needs.

(c) Don't reuse passwords across multiple accounts. If one account gets compromised, others are at risk.

(d) Don't overlook permissions when installing apps. Decline access to unnecessary data like your contacts or camera.

(e) Don't assume privacy is guaranteed.

TIPS

- Anything you post online can potentially be seen by others, even if your account is private. Be thoughtful about what you share.



PART II : EVALUATING AND DISSEMINATING INFORMATION

5. Being responsible with the information you share prevents the spread of misinformation and supports informed communities. One commonly encountered type of malicious message or link is 'Clickbait'. It is a type of online content, often a headline or thumbnail, designed to attract attention and encourage clicks, with the content sensationalized or misleading. It relies on exploiting the "curiosity gap" and often uses emotional appeals or vague language to entice users to click eg, headlines like "I saw this and I was SHOCKED!" or "You won't believe what happened next!" While some of these may only be aimed at increasing number of views, other can be hiding dangerous malware, and are hence best avoided.

6. **Dos.**

- (a) Check the publication date of articles to ensure they're still relevant. At the least you will be embarrassed by not checking the content prior to sharing and at worst you can also face legal issues.
- (b) Look for information from well-established news outlets or official organisations. The govt websites and apps have a plethora of content and always aim to use these websites wherever feasible.
- (c) Fact-check visual content (e.g., images, memes, or videos) using tools like reverse image search. Do not go by whatever your friends post.
- (d) Engage with educational content that helps you spot misinformation.

7. **Don'ts.**

- (a) Don't share "breaking news" from unverified sources in haste. Never share information in haste, you might end up repenting later.
- (b) Don't assume that popular or viral content is automatically trustworthy. Most often, the most viral content may not be factually correct or may be hiding some information.
- (c) Don't forward chain messages or emails without verifying their authenticity. Once you send such messages or emails, it is automatically considered that you endorse the information or agree with it.
- (d) Don't engage with conspiracy theories or extremist views; these often spread falsehoods and create divisions.
- (e) Don't engage with click-bait, however engaging or attractive it may be.

TIPS

- Learn to differentiate between satire, opinion, and news. Always aim to share accurate and meaningful content.



PART III : FOSTERING RESPECTFUL ONLINE CONTENT

8. Social media connects us with diverse groups of people, which makes respectful communication crucial. Positive interactions can create safe and enjoyable online communities.

9. **Dos.**

(a) Use emojis and polite language to clarify your tone in written communication. Be wary of how certain emojis may be misunderstood.

(b) Encourage others by liking or commenting on their achievements and positive posts. Positive reinforcement of ideas within your friend circle will create a happy environment in which everyone can thrive.

(c) Apologise sincerely if you've hurt someone online, even unintentionally. A heartfelt apology goes a long way in resolving differences.

(d) Spread awareness about important causes respectfully and thoughtfully. Understand the cause before you take it up and always accept that there will always be opposing views which need to be heard with respect.

10. **Don'ts.**

(a) Don't post or share inappropriate jokes, even if you think they're harmless. What may seem harmless to you may be extremely hurtful to another person.

(b) Don't use social media as an outlet for venting anger or frustration.

(c) Don't assume anonymity excuses bad behaviour; your actions reflect on you. Anonymity is not a shield to hid misbehaviour, your actions reflect on you irrespective of whether anyone is aware about it.

(d) Don't participate in cancel culture without understanding the full context of an issue. It could very easily be you under different circumstances.

TIPS

- Use social media to uplift and inspire others. Share achievements, positive messages, or helpful resources rather than drama or negativity.

PART IV : IDENTIFYING AND EVADING SCAMS

11. Scammers are constantly looking for ways to trick people into giving away personal information or money. Recognising these tactics can save you from falling victim.



12. **Dos.**

- (a) Be cautious when receiving emails, messages, or friend requests from unknown individuals. Scammers often pose as legitimate organisations or even friends. Always double-check the sender's details before responding.
- (b) Recognise phishing attempts. These include emails or messages that ask for your passwords, bank details, or social security numbers. Legitimate companies will never request sensitive information through informal channels.
- (c) Double-check email addresses and website URLs for subtle misspellings or unusual domains (e.g., ".xyz" instead of ".com"; iciicibank instead of icicibank).
- (d) Research unknown companies before making online purchases.
- (e) Keep your antivirus software and operating systems updated.

13. **Don'ts.**

- (a) Don't trust deals, giveaways, or offers that seem too good to be true. Scammers often use these to bait victims.
- (b) Don't click on suspicious links or download attachments from unknown sources. Doing so could install harmful malware on your device.
- (c) Don't respond to messages claiming you've won a prize or lottery you didn't enter.
- (d) Don't share personal or financial information over unsecured public Wi-Fi.
- (e) Don't trust pop-up ads that urge you to act immediately; these often contain malware.
- (f) Don't fall for "emergency" requests for money from friends or family without confirming their identity.

TIPS

- Use antivirus software and update it regularly. Staying vigilant can protect you from even the most convincing scams.

PART V : REPORTING AND ADDRESSING MISUSE

14. Sometimes, you may encounter harmful content or behavior online. Knowing how to address it effectively can make the digital space safer for everyone.

15. **Dos.**

- (a) Use reporting tools on social media platforms to flag inappropriate content, harassment, or fake profiles. These tools are there to ensure community safety.



- (b) Inform a trusted adult, teacher, or guardian if you encounter anything that makes you uncomfortable. They can help you handle the situation appropriately.
- (c) Familiarise yourself with the reporting tools available on each platform.
- (d) Block individuals who send inappropriate messages or engage in harassment.
- (e) Keep a record (screenshots, timestamps) of harmful behaviour for evidence if needed.
- (f) Educate yourself about online safety laws of our country.

16. **Don'ts.**

- (a) Don't ignore harmful content or messages. Silence can encourage bad behaviour. Instead, take action to address the issue.
- (b) Don't retaliate or try to handle serious issues on your own. For example, if someone sends you threatening messages, keep a record but report it immediately rather than responding.
- (c) Don't assume small incidents are unimportant; repeated minor offenses can escalate.
- (d) Don't share personal grudges publicly; resolve them offline if possible.
- (e) Don't retaliate with similar harmful behaviour - this only exacerbates the problem.

HIGHER ORDER THINKING SKILLS (HOTS)

- **Can you frame basic rules for students and teachers for contributing content to your school's e-magazine?**

CONCLUSION

17. The internet is a powerful tool that can be used for learning, connecting, and growing. By being mindful of your privacy, sharing accurate information, promoting respect, avoiding scams, and addressing misuse responsibly, you can make the most of your online experience while staying safe. Let's commit to building a better, kinder, and safer digital world.



SUMMARY

➤ Comprehending Privacy Settings.

- **Do.** Regularly update privacy settings, use strong passwords, and keep personal accounts private. Limit sharing sensitive details like location or daily routines.
- **Don't.** Share passwords, accept requests from strangers, or assume default settings are secure.

➤ Evaluating and Disseminating Information.

- **Do.** Verify information before sharing. Cross-check sources, fact-check images, and prefer official or reputable websites.
- **Don't.** Spread unverified content, engage with clickbait, or rely on viral posts as factual without evidence.

➤ Fostering Respectful Online Content.

- **Do.** Use kind, inclusive language, support others, and report cyberbullying. Think twice before posting and apologize if you make a mistake.
- **Don't.** Post offensive jokes, participate in trolling, or fuel online arguments. Avoid contributing to negativity or cancel culture without full context.

➤ Identifying and Evading Scams.

- **Do.** Be cautious with emails, URLs, and online offers. Use secure payment methods and keep your software updated.
- **Don't.** Respond to suspicious messages, click on pop-up ads, or use public Wi-Fi for sensitive transactions.

➤ Reporting and Addressing Misuse.

- **Do.** Report harassment, block harmful accounts, and document inappropriate behaviour. Notify a trusted adult if needed.
- **Don't.** Ignore harmful content, retaliate against bullies, or share private disputes publicly.

**ASSESSMENT EXERCISE****Multiple Choice Questions**

Q1. Which of the following is a recommended action to protect your privacy online?

- (a) Using the same password for all accounts
- (b) Setting your accounts to private
- (c) Sharing your daily routines on public platforms
- (d) Ignoring app permissions

Q2. What is a critical step in verifying the credibility of information online?

- (a) Sharing it immediately if it aligns with your beliefs
- (b) Checking if it has many likes and shares
- (c) Fact-checking it with reliable sources
- (d) Forwarding it to friends for their opinions

Q3. Which behaviour fosters respectful online communication?

- (a) Engaging in online arguments
- (b) Using kind and polite language
- (c) Sharing offensive jokes to entertain others
- (d) Ignoring hurtful comments

Q4. How can you identify a potential phishing scam?

- (a) The sender's email address has unusual spellings or domains
- (b) It asks for no personal details
- (c) The message comes from a verified source with a logo
- (d) It includes a lengthy and detailed explanation

Q5. What should you do if you encounter cyberbullying?

- (a) Ignore it and hope it stops
- (b) Respond aggressively to the bully
- (c) Report it to the platform and inform a trusted adult
- (d) Share the bullying incident publicly to gather support

Q6. Why is it important to review app permissions regularly?

- (a) To allow unrestricted access to your personal data
- (b) To ensure apps only access necessary information



- (c) To give apps full access to your location
- (d) To speed up app performance

Q7. What is an example of spreading misinformation online?

- (a) Verifying content with multiple sources before sharing
- (b) Sharing a viral post without checking its accuracy
- (c) Using tools to fact-check visual content
- (d) Avoiding clickbait headlines

Q8. What is the primary purpose of reporting inappropriate content on social media?

- (a) To retaliate against the person who posted it
- (b) To draw attention to the content
- (c) To maintain a safe and respectful online environment
- (d) To prevent others from seeing it

Q9. Which of the following is a sign that an online offer might be a scam?

- (a) The offer seems too good to be true
- (b) It comes from a trusted, verified source
- (c) It requires no payment or personal information
- (d) The link directs you to a reputable website

Q10. What is a healthy way to handle disagreements on social media?

- (a) Respectfully express your views and listen to others
- (b) Use insults to prove your point
- (c) Share private conversations publicly to gain support
- (d) Ignore the person entirely without clarifying your stance

Q11. You opened a video link which your friend sent you. Immediately a pop-up window appeared with a link to win a free iPhone. What do you do?

- (a) Click on the link and enter your address
- (b) Share the link with all your friends
- (c) Share the link on your family Whatsapp group
- (d) Close the window and tell your friend not to share this link with anyone else

Q12. Someone you briefly interacted in an inter-school event has shared a WhatsApp group link for sharing pirated movies. What do you do?

- (a) Ignore it altogether.



- (b) Share the link with all your friends
- (c) Share the link on your family Whatsapp group
- (d) Join the Whatsapp group

Q13. You received a forwarded message link from an unknown source saying “Breaking News - School Closure ordered tomorrow due to heavy rain forecast”. What would you do?

- (a) Check authenticity of the news from the major news websites and the state government website.
- (b) Forward the message to all your friends
- (c) Forward the message to your parents
- (d) Click the link to see the content

Q14. One of your friends suggests that you create a dummy profile to join your school community and post jokes on it. How do you respond?

- (a) Explain to your friend that a simple prank on Social Media can lead to major consequences
- (b) Go ahead and create the profile
- (c) Dare your friend to do it instead of you
- (d) Create the profile in your friend’s name and start posting jokes

Q15. Your cousin recommended a new app to keep track of your expenses on your phone. You would really like to use it. What do you do?

- (a) Install it and adjust all the privacy settings to suit you
- (b) Ignore the app
- (c) Install it with default settings
- (d) Forward to your contacts without checking

Short Answer Questions

Q1. What is the purpose of reviewing and updating privacy settings on social media platforms?

Q2. How can fact-checking information before sharing it help combat the spread of misinformation?

Q3. Why is it important to use strong and unique passwords for different online accounts?

Q4. What should you do if you encounter harmful or inappropriate content on a social media platform?

Q5. What is 'Clickbait'? Illustrate with examples.



Long Answer Questions

- Q1. Explain the steps you should take to identify and evade online scams. Include examples of common scam tactics and how to handle them safely.]
- Q2. Discuss the importance of fostering respectful online communication. How can your actions positively influence the digital community, and what are the consequences of disrespectful behaviour?
- Q3. Describe the role of privacy settings in protecting your personal information. How can failing to manage privacy settings lead to potential risks?
- Q4. Evaluate the impact of spreading misinformation online. Discuss how it affects individuals and society, and suggest strategies to prevent its spread.
- Q5. List the Dos and Don'ts with regards to privacy settings.

CAREER **COUNSELLING**

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CAREER COUNSELLING (JD/JW)

CHAPTER CC I : ENTRY IN ARMED FORCES AS AGNIVEER

“Some goals are so worthy; it’s glorious even to fail.”

Capt Manoj Kumar Pandey, PVC



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture and Practice
Year	:	2nd Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/Lesson Plan; White board & Marker, VPS, PPT/Charts

Time Plan

• Introduction	:	05 Mins
• Part I	:	15 Mins
• Part II	:	15 Mins
• Conclusion	:	05 Mins



INTRODUCTION

1. NCC cadets of Junior Division/Wing have a wide range of career options available to them after completing their 10th/12th standard. Among the major ones is also the *Agnipath* Scheme, which paves the way to become *Agniveers* in the three services. The scheme has unique eligibility criteria, a recruitment process, and career progression.



LEARNING OBJECTIVES

- Enlisting career opportunities for cadets after the 12th.
- Understanding the Agnipath Scheme.
- Understanding the eligibility criteria, recruitment process, and career progression of Agniveer in the armed forces.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Agnipath Scheme.
- (b) Part II : Eligibility Criteria, Recruiting Process, and Career Progression for agniveers.

INTERESTING FACTS

- Unlike traditional recruitment, the Agnipath scheme is a short-term enrolment for a fixed term of four years. However, 25% of those who apply for permanent cadre and are found fit, would be retained.
- The scheme aims to rejuvenate the armed forces with a youthful profile and introduce modern management practices.

PART I : AGNIPATH SCHEME

2. The *Agnipath* scheme of the government was implemented in June 2022. It provides an opportunity for the youth to enrol as an *Agniveer* in the three services and serve the nation. Candidates will be enrolled under the respective service act for a service duration of four years, including a training period. Recruitment will be as per the terms and conditions promulgated by the Government of India. Candidates selected will undergo rigorous training in various existing training centres. It is an opportunity for youths to serve in varied terrains including mountains and deserts.

3. *Agniveer* is a pan-India merit-based recruitment. It is a four-year scheme with attractive emoluments and a handsome “*Seva Nidhi* Package.” It also provides an opportunity to apply for enrolment in the permanent cadre. Based on merit and performance, 25% of *Agniveers* would be selected through a central and transparent system after four years.

4. For the youths of India, it is an opportunity to fulfil their dream of joining the Armed Forces, where they can imbibe military discipline, physical fitness, motivation, and various skills during their tenure as *Agniveers*. Individuals not wanting to opt for permanent cadre will still have a unique resume. They will stand out in society with their military discipline, motivation, and skills achieved in their service with the Armed Forces.

5. **Agniveer Service.** *Agniveers*’ service will commence from the date of enrolment. *Agniveer* is a distinct rank in the Indian Army, different from other existing ranks. Personnel enrolled through this scheme will be required to undergo periodical medical check-ups and physical/written/field tests as governed by orders. The demonstrated performance would be considered for a subsequent offer for enrolment in the regular cadre.



Agnipath Scheme

- Agniveers will be enrolled for a duration of 4 years including training period
- Age - 17½ - 21 Years
- 1st year salary package of ₹4.76 lakh (approx.) with upgradation of up to ₹6.92 lakh (approx.) in 4th year
- Non Contributory Insurance Cover of ₹48 Lakh

6. **Discharge.** All *Agniveers* will be discharged on completion of four years of service. On discharge after completion of four years, *Agniveers* will be paid a ‘*Seva Nidhi*’ package to enable them to return to society for pursuing employment in other sectors. *Agniveers* will be barred from disclosing classified information gained during service to any unauthorised person or source under the Official Secrets Act, 1923.

7. **Enrolment for Regular Cadre.** Based on organisational requirements and policies promulgated, *Agniveers* completing their engagement period in each batch will be offered an opportunity to apply for enrolment in the regular cadre. These applications will be considered in a centralised manner based on an objective criterion, including performance during their engagement period, and up to 25% of each batch of *Agniveers* will be enrolled in the regular cadre of the three services post-completion of their four-year engagement period.



8. **Employability.** *Agniveers* will be liable to be assigned any duty in organisational interest, as decided from time to time. *Agniveers* can be posted to any regiment/unit and can be further transferred to other regiments/units in organisational interest.

HIGHER ORDER THINKING SKILLS (HOTS)

- Which are the government and non-governmental agencies that can readily absorb *Agniveers* on completion of their terms of engagement?

PART II : CRITERIA, RECRUITING PROCESS, AND CAREER PROGRESSION FOR AGNIVEERS

9. **Eligibility.** Eligibility criteria, recruiting process, and career progression for *Agniveers* in the Armed Forces are tabulated below:

<u>S.No.</u>	<u>Criteria</u>	<u>Army</u>	<u>Navy</u>	<u>Air Force</u>
(a)	<u>Type of Entry.</u>	<i>Agniveer</i>	<i>Agniveer</i>	<i>Agniveer</i>
(b)	<u>Age.</u>	17.5 to 21	17.5 to 21	17.5 to 21
(c)	<u>Educational Qualifications.</u>	10 th or 12 th 8 th (for tradesmen only, in selected trades)	10 th ,12 th OR 3 Years Diploma Course in Engineering OR 2 Years vocational course with non-vocational subject viz. Physics & Mathematics	12 th OR 3 Years Diploma Course in Engineering OR 2 Years vocational course with non-vocational subject viz. Physics & Mathematics
(d)	<u>Recruitment Process.</u>	Online Application, Online Computer-Based CEE, Physical Fitness Test (PFT) Physical Measurement Test (PMT) Document verification Medical Examination	Online Application, Online Computer-Based INET, Physical Fitness Test (PFT) Physical Measurement Test (PMT) Document verification Medical Examination	Online Application, Online Computer Central Airmen Selection Board Test, Physical Fitness Test (PFT) Physical Measurement Test (PMT) Medical Examination Adaptability Test 1 & 2
(e)	<u>Career Progression.</u>	Ranks: Sepoy to Subedar Major (Only on	Ranks: Sailor to Master Chief Petty Officer	Ranks: Airman to Master Warrant Officer (Only on retention)



		retention) Pay - (Rs. 30,000 to 40,000) - <i>Agniveers</i> receive a lump sum payment of Rs. 11.71 lakh (approx.) and a life insurance policy worth Rs 48 lakh.	(Only on retention) Pay - (Rs. 30,000 to Rs. 40,000) - <i>Agniveers</i> receive a lump sum payment of Rs 11.71 lakh (approx.) and a life insurance policy worth Rs 48 lakh.	Pay - (Rs. 30,000 to Rs. 40,000) - <i>Agniveers</i> receive a lump sum payment of Rs. 11.71 lakh (approx.) and a life insurance policy worth Rs. 48 lakh.
(f)	<u>Physical Standard.</u>	Must meet physical standards laid down	Must meet physical standards laid down	Must meet physical standards laid down
(g)	<u>Medical Standard.</u>	Must be medically fit.	Must be medically fit	Must be medically fit

10. **Award of Bonus Marks for Entry as Agniveers.** The following bonus marks will be awarded on qualifying in the written examination to the undermentioned categories:

<u>S. No.</u>	<u>Category</u>	<u>Agniveer (General Duty) (Total Max Marks 200)</u>	<u>Agniveer Office Asst /SKT/Tech (Total Max Marks 200)</u>	<u>Agniveer Tradesmen (Total Max Marks 200)</u>
(a)	Son of Serving (SOS) Soldier/ESM (SOEX)/Son-in-Law of a War Widow (SOWW)/Son of Widow (SOW) (One son only)	20 Marks	20 Marks	20 Marks
(b)	<u>Sportsmen.</u>			
	(i) Represented India at the International level.	20 Marks	20 Marks	20 Marks
	(ii) Represented the state at the Senior/Junior National level and won any medal in an individual event or reached up to eighth position in team event,	15 Marks	15 Marks	15 Marks
	(iii) Represented College/University in the Inter-University Championship and won a medal in an individual	10 Marks	10 Marks	10 Marks



	event or reached up to sixth position.			
	(iv) Represented the State at the National Level in the <i>Khelo</i> India Games and won a medal in an individual event or reached up to sixth position.	10 Marks	10 Marks	10 Marks
	(v) Represented District at the State Level and won any medal in an individual event or reached up to fourth position.	05 Marks	05 Marks	05 Marks
	(vi) Represented the State school team in the events organised by the All-India School Games Federation and won any medal in an individual event or up to sixth position in the team event.	05 Marks	05 Marks	05 Marks
(c)	NCC 'A' Certificate	05 Marks	05 Marks	05 Marks
(d)	NCC 'B' Certificate	10 Marks	10 Marks	10 Marks
(e)	NCC 'C' Certificate	20 Marks	15 Marks	15 Marks
(f)	NCC 'C' Certificate and participated in Republic Day Parade	25 Marks	20 Marks	20 Marks
(g)	Candidates for <i>Agniveer</i> Office Assistant/SKT cat having 'O' level (IT) Course Certificate issued by NIELIT and having higher-level IT Courses Certificate from NIELIT, i.e., 'A', 'B', or 'C' level. ('O' level (IT) course certificate under the DOEACC scheme issued only by NIELIT on or after 01 Jan 2020.	--	15 Marks	--
(h)	Bonus Marks for ITI/Skill-qualified candidates are as under:			
	(i) 10th plus two-year course at ITI	--	20 Marks	--
	(ii) 10th plus 02/03-year Diploma.	--	30 Marks	--
	(iii) 12th plus one-year course at ITI	--	30 Marks	--
	(iv) 12th plus two-year course at ITI	--	40 Marks	--
	(v) 12th plus diploma holder	--	50 Marks	--

*Corresponding weightage for NCC certificate holders wrt *Agniveer Navy & Agniveer Vayu* could be checked from joinindiannavy.nic.in & joinindianairforce.nic.in respectively.



CONCLUSION

11. The *Agnipath* scheme will help the armed forces in maintaining a young and robust force. In four years of their service with the Armed Forces, *Agniveers* will get a plethora of opportunities to develop various skills which can be beneficial in their second career. The scheme aims to modernise the armed forces and provide opportunities for youth to serve the country. The *Agnipath* scheme offers several potential benefits, including financial security, skill development training, and career growth opportunities.

SUMMARY

- Agniveer is an attractive career option for NCC cadets after the 10th/12th standard.
- NCC training equips cadets with valuable skills like leadership, discipline, and teamwork, applicable in various careers.
- It encourages cadets to explore their strengths and choose a career that best suits them. It also provides resources for further information on specific career options.
- The unique eligibility criteria, recruiting process, and career progression of Agniveers provide a range of options to them on completion of their terms of engagement.

**ASSESSMENT EXERCISES****Multiple Choice Questions**

Q.1. When was the *Agnipath* Scheme implemented by the government?

- (a) January 2022 (b) June 2022
(c) March 2023 (d) September 2024

Q.2. What is the duration of service for *Agniveers* in the *Agnipath* Scheme?

- (a) 5 years (b) 4 years
(c) 6 years (d) 2 years

Q.3. What is the maximum percentage of *Agniveers* who can be selected for the regular cadre after four years?

- (a) 30% (b) 25%
(c) 50% (d) 10%

Q.4. What are the bonus marks in entry as *Agniveer* for the '10th plus two-year course at ITI'?

- (a) 10 (b) 15
(c) 20 (d) 25

Q.5. What is the number of bonus marks for NCC 'C' certificate holders who have also participated in Republic Day Parade for '*Agniveer* General Duty' entry?

- (a) 5 (b) 10
(c) 20 (d) 25

Q.6. *Agniveers* will be barred from disclosing classified information gained during service to any unauthorised person under which act?

- (a) Official Classified Information Act, 1923
(b) Official Secrets Act, 1923
(c) Indian Secrets Act, 1923
(d) Prohibition Act, 1923

Q.7. What will be the lump sum payment an *Agniveer* receives after four years of service?

- (a) Rs.50 Lakh (b) Rs.11.71 Lakh
(c) Rs. 21 Lakh (d) Rs.25 Lakh

Q.8. In the Army, *Agniveers* after retention can progress up to which rank?

- (a) Naib Subedar (b) Subedar Major



- (c) Master Warrant Officer (d) Major

Q.9. What is the insurance cover for an *Agniveer*?

- (a) Rs. 50 Lakh (b) Rs. 20 Lakh
(c) Rs. 38 Lakh (d) Rs. 48 Lakh

Q.10. What is the unique feature of the rank of *Agniveer* in the Indian Armed Forces?

- (a) It is the same as the regular ranks.
(b) It is a temporary rank.
(c) It is a distinct rank, different from other existing ranks.
(d) It is a special rank given to veterans.

Q.11. After completing their 4 years of service, what financial benefit do *Agniveers* receive?

- (a) Pension benefits (b) Seva Nidhi package
(c) Salary increase (d) Lump sum retirement fund

Q.12. Which of the following is true about *Agniveers*' employment after their service?

- (a) They are guaranteed a government job after service.
(b) They will have a unique resume with military discipline and skills.
(c) They cannot be transferred to different regiments.
(d) *Agniveers* receive a pension after their service.

Q.13. The *Agnipath* Scheme aims to modernise the armed forces by:-

- (a) Focusing only on recruitment of experienced personnel.
(b) Giving large-scale opportunities to young individuals to serve.
(c) Reducing the number of personnel in the armed forces.
(d) Increasing the number of pension benefits.

Q.14. Which of the following duties are *Agniveers* liable to perform during their service?

- (a) They can choose their duty based on their preference.
(b) They can be assigned any duty in organisational interest.
(c) They only work in combat zones.
(d) They can only perform administrative tasks.



Q15. How are *Agniveers*' applications for enrolment in the regular cadre evaluated?

- (a) Based on their age
- (b) Based on the subjective opinion of their commanding officers
- (c) Through a centralised merit-based system
- (d) Based on their family background

Short Answer questions

- Q1. What is the purpose of the *Agnipath* Scheme introduced by the government?
- Q2. How many marks are given as a bonus for NCC 'C' Certificate holders in the *Agniveer* Scheme?
- Q3. How does the NCC cadet training help the enrolment process of the Armed Forces?
- Q4. Which entrance exams are required for joining as an *Agniveer*?
- Q5. What is the benefit of being a child of an ex-serviceman during enrolment as an *Agniveer*?

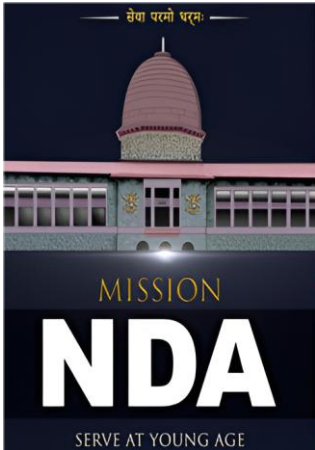
Long Answer Questions

- Q1. Explain the service terms and conditions of *Agniveer*.
- Q2. Discuss the advantages of the *Agnipath* Scheme for young people in India.
- Q3. Explain the career progression of an *Agniveer* in the Army, Navy, and Air Force after retention.
- Q4. Explain the recruitment process in the three services of the armed forces as *Agniveer*.
- Q5. How Does being in NCC help an *Agniveer* aspirant?

CAREER COUNSELLING (JD/JW)
CC II : ENTRY IN NDA/TES/JAG/MNS

“Bravery is not the absence of fear, but the ability to overcome it.”

General Pran Nath Thapar.



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture and Practice
Year	:	2nd Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/Lesson Plan; White board & Marker, VPS, PPT/Charts

Time Plan

• Introduction	:	05 Mins
• Part I	:	10 Mins
• Part II	:	10 Mins
• Part III	:	10 Mins
• Conclusion	:	05 Mins





INTRODUCTION

1. The Indian Armed Forces offer a plethora of opportunities for young, enthusiastic individuals to serve their nation. Those who aspire to put on the uniform and start a career filled with challenges and glory have several entry schemes available to them. Joining the Indian Army offers a unique and honourable path for individuals seeking a fulfilling and impactful career. It means dedicating oneself to the service and protection of the nation, contributing directly to its safety and well-being.



LEARNING OBJECTIVES

- Enlisting career through NDA & TES Scheme.
- Enlisting a career through the JAG & MNS scheme.
- Understanding eligibility criteria, recruitment processes, and career progression.

PREVIEW

The lecture will be conducted in the following parts:

- Part I : NDA & TES Entry in Armed Forces.
- Part II : JAG & MNS Entry in Armed Forces
- Part III : Eligibility Criteria for NDA, TES, JAG & MNS Entry

INTERESTING FACTS

- The National Defence Academy (NDA) is the first tri-service academy in the world.
- The NDA cadet's mess is the largest in Asia, capable of seating over 2,100 cadets at once.
- The JAG branch is the legal backbone of the Indian Army.

PART I : NDA AND TES ENTRY IN ARMED FORCES

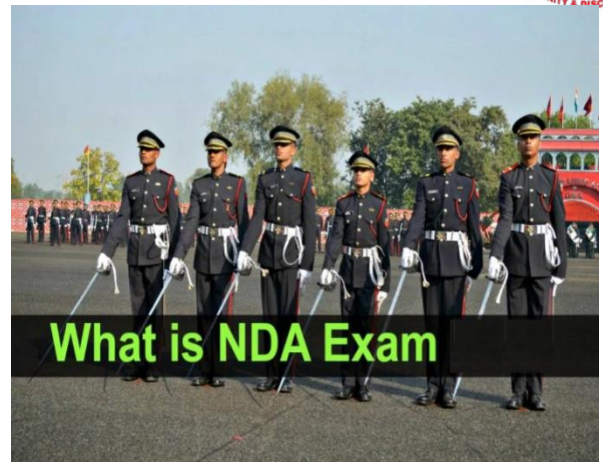
National Defence Academy

2. **National Defence Academy (NDA)**. The National Defence Academy (NDA) caters to those who dream of joining the Army, Navy, or Air Force after completing their 12th standard. The NDA is the premier institution for grooming young minds to become officers in the defence services. After completing 12th, aspiring candidates can appear for the



NDA entrance exam. Successful candidates undergo a rigorous three-year training program that covers academics, physical fitness, and military skills.

3. The NDA examination is conducted by the Union Public Service Commission (UPSC). NDA is the national-level examination that is conducted to recruit qualified candidates as officers in the Indian Navy, Indian Army, and



Indian Air Force. The exam is conducted twice a year, i.e., in the month of April and September. The exam comprises written and SSB interviews.

4. **Few Facts about NDA.** NDA was inaugurated by the then-Prime Minister Jawaharlal Nehru on January 16, 1950. NDA is spread over an area of about 1250 acres. It has a strength of about 2000 cadets at any given time. There are a total of 18 squadrons holding around 100-120 cadets per squadron and a staff of about 300 officers. The National Defence Academy is affiliated with the Jawaharlal Nehru University (JNU) in New Delhi. Army cadets receive a B.A., B.Sc., and B. Sc.(Computer Science) degree, while Navy and Air Force cadets receive a B. Tech. degree.

5. NDA is the first tri-service academy in the world. The National Defence Academy has been training officers of the Indian Armed Forces since its inception. NDA has produced some of the finest officers of the Indian Armed Forces.

6. **Further Training.** After completion of three years of training and passing out from NDA, the Gentlemen Cadets (GCs) go to IMA, INA, or AFA, as per the parent service, for further training of one year. On completion of the same, they are commissioned as lieutenants in the army and equivalent ranks in the other two services.

Technical Entry Scheme (TES)

7. **Technical Entry Scheme (TES).** The Technical Entry Scheme (TES) provides a direct entry into the technical branches of the Indian Army. The Technical Entry Scheme is an excellent option for those with a technical background. Training of TES cadets is conducted in two phases. In phase one, integrated basic military training and engineering training at CME (Pune)/MCTE (Mhow)/MCEME (Secunderabad) for three years. In phase two, integrated basic military training and engineering training for one year at IMA, Dehradun, or designated PCTA (Pre-Commission Training Academy). For more information, check the website www.joinindianarmy.nic.in.



8. **Award of Degree.** The candidates will be awarded an engineering degree after successful completion of 04 (four) years of training. No ante-date seniority will be admissible to candidates on account of this engineering degree.

Preparation

9. **Essential Steps to Prepare.**

(a) **Written Exam.** Candidates aspiring to become Armed Forces officers through NDA have to appear in the written examination conducted by UPSC twice a year. Those making it on the merit list will be called for SSB. For TES Entry, there is no separate written exam; candidates are shortlisted based on their academic record and performance in JEE Mains.

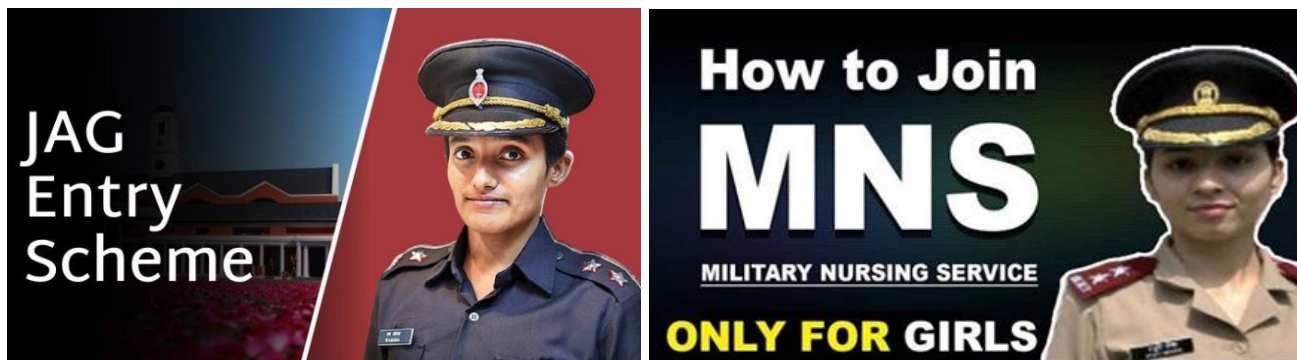
(b) **SSB Preparation.** Those clearing the NDA written exam or screening of TES are called for SSB. The SSB is a comprehensive process that assesses the personality and aptitude of candidates. Practice group discussions, story writing, and situational awareness to excel in this stage.

(c) **Stay Updated with Current Affairs.** Keep updated on current affairs, national and international issues, and geopolitical scenarios. General awareness is a crucial component of written exams and interviews. For more information, check the website www.joinindianarmy.nic.in.

PART II : JUDGE ADVOCATE GENERAL (JAG) & MILITARY NURSING SERVICE (MNS) ENTRY IN ARMED FORCES

11. **Judge Advocate General (JAG).** For law graduates with a strong liking for military service, the Judge Advocate General (JAG) entry is an ideal option. The Judge Advocate General (JAG) entry offers a unique opportunity for law graduates to serve the nation in the Indian Army. This prestigious entry scheme allows legal professionals to combine their expertise with military discipline and leadership. JAG officers play a crucial role in providing legal advice, conducting court-martials, and handling various legal matters within the armed forces. This challenging and rewarding career path provides an excellent platform to

contribute to national security while upholding the principles of justice and law. For more information, check the website www.joinindianarmy.nic.in.



12. **Military Nursing Service (MNS)**. The Indian Military Nursing Service was raised on 15th September 1943 as part of the Armed Forces union and for service with Indian Military forces, which was designated as the Military Nursing Service. The members of the service were appointed as Officers (Indian Military Nursing Service) by the Central Government notification in the Official Gazette.

13. The Nursing Officers of the Military Nursing Service render yeoman service to the country at all times, looking after the soldiers and their families. The highly skilled specialised nursing officers contribute greatly to the quick recovery and optimal wellness of their patients by providing care with compassion, imbibing preventive and rehabilitative care aspects. The motto of MNS is "**Service with a smile**".

14. This entry scheme allows aspiring nurses to join the Indian Armed Forces as commissioned officers. MNS officers provide essential healthcare services to military personnel and their families. For more information, check the website www.joinindianarmy.nic.in.

HIGHER ORDER THINKING SKILLS (HOTS)

- You have been approached by your friends who want to know about 'joining the Indian Army'. What guidance will you give them?

PART III : ELIGIBILITY CRITERIA FOR NDA, TES, JAG & MNS ENTRY

16. For cadets to aspire to and pursue a career in their chosen field, they should ensure that they meet the required criteria of that field and post. In the armed forces, the criteria are specific with regard to the educational qualifications, age limits, and medical condition of prospective candidates.

17. The selection process will also be different for different jobs. The Job profile and description determines the type of qualities a candidate should possess and hence the



selection process for various jobs aims to determine if they possess a given quality or not. For example, being a pilot in the Air Force, one should, amongst other qualities, also have cleared the Pilot Aptitude Battery Test (PABT).

18. As a cadet, one should also be aware of the progress one can make as an individual as their career progresses. Let us have a look at the eligible criteria for each entry we have discussed in the above parts of this chapter:

(a) **Eligibility Criteria for NDA**. Is as under :-

S. No.	Particulars	Details
(i)	Name of Exam	NDA
(ii)	Conducting Body	UPSC
(iii)	Exam level	National
(iv)	Post	Lieutenant
(v)	Marital Status	Unmarried
(vi)	Gender	Male/Female
(vii)	Age	16.5 to 19.5 years
(viii)	Qualification	<ul style="list-style-type: none"> Army Wing: Passed or appeared in Class 12 from any stream. For Air Force and Naval Wings: Candidates must have studied Physics, Chemistry, and Mathematics in Class 12.
(ix)	Physical Test	The eligibility of candidates is measured based on their height, weight and medical standards
(x)	Selection Process	Written Exam & SSB Interview

(b) **Eligibility Criteria for Technical Entry Scheme (TES)**. Is as under :-

S. No.	Category	Description
(i)	Type of Entry	Technical Entry Scheme (TES)
(ii)	Age	16½ to 19½
(ii)	Open for	Unmarried Males
(iv)	Education Qualification	<ul style="list-style-type: none"> 10+2 Physics, Chemistry & Math (aggregate 60% and above to apply) and appeared in JEE Mains
(v)	Selection Process	Application > Shortlisting > SSB > Medical > Merit List > Joining Letter
(vi)	Duration of SSB	Five days SSB



(vii)	Pre-Commission Training Academy	Indian Military Academy (IMA), Dehradun
(viii)	Duration of Training	4 years
(ix)	Award of Degree	Engineering Degree
(x)	JEE Mains	Appeared for JEE Mains
(xi)	Nationality	Indian

(c) **Eligibility Criteria for JAG Entry (Men & Women)**. Is as under :-

S.No.	Particulars	Details
(i)	Vacancies Per Course	10 (As Notified) (Twice a year)
(ii)	Notification Published in Employment News and Leading Daily Newspapers	Notified by Directorate General Recruiting/AG Branch in July/August and January/February
(iii)	Age	21 to 27 years
(iv)	Qualification	<ul style="list-style-type: none"> Law Graduate with 55% Aggregate Marks and eligibility for registration with the Bar Council of India/State. In addition, the CLAT PG score of the preceding year is mandatory for all candidates (including LLM-qualified and LLM-appearing candidates)
(v)	Marital Status	Unmarried
(vi)	How to Apply	Apply online on the official website of DG Rtg www.joinindianarmy.nic.in as notified in the Notification.
(vii)	Likely SSB Date	December/January and July/August
(viii)	Date of Commencement of Training	April and October
(ix)	Training Academy	OTA, Chennai
(x)	Duration of Training	49 weeks

(d) **Eligibility Criteria for MNS in Armed Forces**. Is as under :-

S.No.	Particulars	Details
(i)	Nationality	Indian
(ii)	Conducting Body	IHQ of MoD
(iii)	Exam level	National
(iv)	Post	Lieutenant
(v)	Marital Status	Unmarried/Divorcee/Legally Separated
(vi)	Gender	Female



(vii)	Age	21 to 35
(viii)	Education	B.Sc. Nursing, B.Sc. (Post Basic) Nursing, or M.Sc. Nursing from a recognised nursing college.
(ix)	Physical Test	As prescribed by DGMS notification
(x)	Selection Process	Written Exam, Interview, Medical Exam
(xi)	NEET	Must qualify NEET (Implemented w.e.f. 2024)
(xii)	Registration	Only female applicants are eligible for MNS Staff Nurse, and they must be registered as a nurse or a midwife.

CONCLUSION

19. Joining the Indian Armed Forces is not just a profession; it is a way of life and a commitment to safeguarding the nation. Knowledge about various entries allows one to have options and decide on the one best suited as per individual inclination and interest.

SUMMARY

- NDA (National Defence Academy) trains cadets for the Indian Army, Navy, and Air Force after Class 12.
- NDA conducts entrance exams twice a year, followed by written tests and interviews (SSB).
- Technical Entry Scheme (TES) is a scheme for candidates with a technical background, offering direct entry into the Indian Army.
- Judge Advocate General (JAG) entry is for law graduates to serve as legal officers in the Indian Army, providing legal advice and handling court-martials.
- MNS offers women the opportunity to join the Armed Forces as Nursing Officers, providing healthcare to military personnel and their families.
- For NDA and TES, it is crucial to prepare for written exams and interviews, maintain physical fitness, and make sure you meet your educational requirements.



ASSESSMENT EXERCISE

Multiple Choice Questions

- Q1. What is the main purpose of NDA?**
- (a) To train doctors for the Army
 - (b) To train officers for the Indian Armed Forces
 - (c) To train pilots for the Air Force
 - (d) To train engineers for the Navy
- Q2. The training in NDA is for how many years?**
- (a) 2 years
 - (b) 3 years
 - (c) 4 years
 - (d) 5 years
- Q3. Who conducts the NDA entrance exam?**
- (a) UPSC
 - (b) Indian Army
 - (c) Indian Navy
 - (d) Indian Air Force
- Q4. Where is the National Defence Academy located?**
- (a) Delhi
 - (b) Dehradun
 - (c) Pune
 - (d) Bangalore
- Q5. Which entry scheme is for candidates with a technical background?**
- (a) TES
 - (b) NDA
 - (c) JAG
 - (d) MNS
- Q6. What degree do Navy and Air Force cadets receive in NDA?**
- (a) B.A.
 - (b) B.Tech
 - (c) B.Sc.
 - (d) M.Tech.
- Q7. What is the motto of the Military Nursing Service (MNS)?**
- (a) Service with Strength
 - (b) Service with Honour
 - (c) Service with a Smile
 - (d) Service with Pride
- Q8. What is the primary job of JAG officers?**
- (a) To provide legal advice
 - (b) To lead soldiers in battle
 - (c) To train cadets
 - (d) To handle medical emergencies



Q9. The maximum age criteria for JAG entry is:-

- (a) 26 Years (b) 27 Years
(c) 25 Years (d) 24 Years

Q10. Which phase is a part of the TES training program?

- (a) Pilot Training (b) Engineering Training
(c) Medical Training (d) Equipment Training

Q11. Which year was the National Defence Academy (NDA) inaugurated?

- (a) 1947 (b) 1950
(c) 1975 (d) 1948

Q12. What is the essential qualification for candidates applying for JAG (Judge Advocate General) entry in the Indian Army?

- (a) Graduation in Engineering
(b) Graduation in Law
(c) Graduation in Science
(d) Graduation in Arts

Q13. How many squadrons does NDA have now?

- (a) 19 (b) 16
(c) 18 (d) 20

Q14. What is the primary role of the Military Nursing Service (MNS) officers?

- (a) Conducting military operations
(b) Providing healthcare services to military personnel and their families
(c) Training soldiers in combat
(d) Assisting in strategic planning

Q15. Which of the following degrees do Army Cadets receive after completing their NDA training?

- (a) B.A. (b) B.Sc.
(c) B. Tech. (d) Both A and B

Short Answer questions

Q1. NDA is recognised by which university, and what all degrees does it offer to cadets?

Q2. What is the role of JAG officers in the Indian Army?

Q3. What is the primary aim of the Military Nursing Service (MNS)?

Q4. How does NDA contribute to national defence?



Q5. How does the JAG entry differ from the TES and NDA entries?

Long Answer Questions

Q1. Discuss the eligibility criteria for applying to NDA and TES.

Q2. Describe the role of MNS officers in the Indian Armed Forces and their contribution to national defence.

Q3. What are the main differences between NDA and TES in terms of the entry process and training?

Q4. What are the advantages of joining the Indian Armed Forces through the JAG entry for law graduates?

Q5. Explain the selection procedure for candidates applying for NDA, TES, and JAG entry schemes.

INNOVATION **CONCEPT**

CHAPTER-WISE INDEX : INNOVATION CONCEPT (JD/JW)

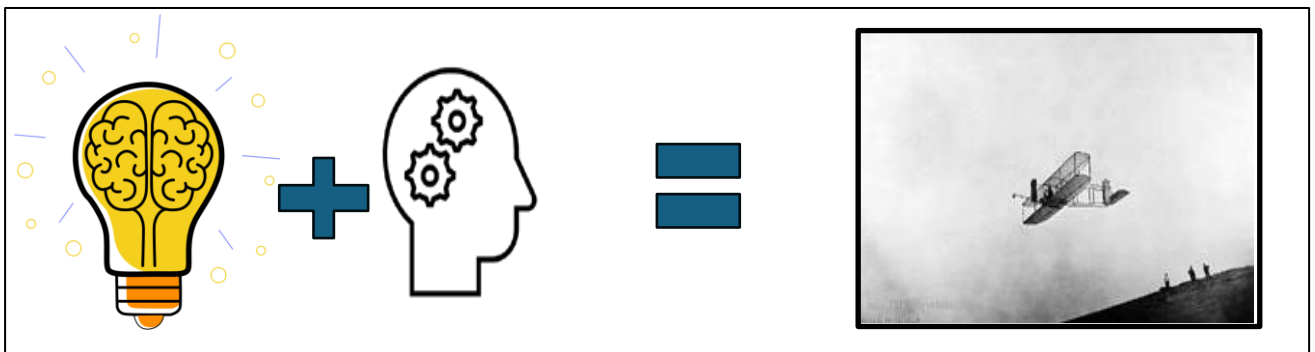
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INNOVATION CONCEPT (JD/JW)

CHAPTER IC 1: CREATIVE THINKING AND INTRODUCTION TO INNOVATION CONCEPTS

“If you fail , never give up because F.A.I.L means First Attempt In Learning, end is not the end , in fact E.N.D means Effort Never Dies, if you get no as an answer, remember N.O means Next Opportunity.”

Former President, Dr APJ Abdul Kalam



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture
Year	:	2nd Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/Lesson Plan; OHP, Board with Chalk/ Markers.

Time Plan

• Introduction	:	02 Mins
• Part I	:	15 Mins
• Part II	:	15 Mins
• Part III	:	05 Mins
• Conclusion	:	03 Mins





INTRODUCTION

1. Humans distinguish themselves from other species by the fact that they have an analytical brain which enables them to think deeper, better and faster. Humans have the unique ability to innovate due to their superior brain. So what is Innovation? Innovation is a vital concept that drives progress in various fields. It refers to the process of translating ideas and newer methodologies into processes that create value or fulfill a need to solve existing problems in an innovative way. E.g. Farmers in India have been continuously using numerous innovative solutions like water-pumping vehicles equipped with motors to draw water out of a well, drip irrigation systems, solar powered equipments, mobile apps for farm management, etc. to boost productivity and address their daily challenges. Wouldn't it be wonderful if all ideas could be translated to practical use? To understand this, "Innovation Concept" needs to be explored.

2. **Definition.** Innovation is the process by which new ideas or methods are utilised to add value or provide solutions to existing challenges/problems in novel ways, so as to get maximum efficiency by making use of easier and strategically thought processes.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Creative Thinking
- (b) Part II : Innovation Process
- (c) Part III : Hands on Project

LEARNING OBJECTIVES

- Understanding the need for Innovation
- Learn Creative Thinking
- Innovation Process
- Undertake a Project in a group to apply Creative Thinking and Innovation Process to ascertain solutions to a Problem.

3. Ideation plays a critical role in driving innovation as it involves the ability to adapt quickly and think & come up with creative solutions, often with limited resources against unexpected challenges. To convert an idea into an innovation, what is required is creative thinking and subjecting the Idea to an 'Innovation Process'.

PART I : CREATIVE THINKING

4. Creative Thinking provides the foundation of new and unique ideas, while innovation is the process of transforming those ideas into tangible outcomes. To understand creative thinking, it is first essential to understand the need for innovation.



Need for Innovation

5. The necessity for innovation arises from the constant evolution of societal needs that demand efficient solutions for all its problems with minimal efforts and costs. As challenges become complex, traditional methods are required to be evolved. For example, if vehicles operating on fossil fuels are a source of pollution, hence alternative solutions need to be found. Therefore, innovation is crucial for improving existing solutions and adopting new approaches that lead to overall improvement in efficiency and quality of life.

6. **Enhancing Existing Solutions.** This is done by improving efficiency by reducing time, effort and cost which meets new demands of the hour. For example, design innovations in applications or websites for use by people with disabilities. Another example are conduct of online exams instead of the traditional pen-and-paper based ones, enabling efficient simultaneous testing across the country.

7. **Adopting New Approach.** Here a new approach is adopted, totally different from the existing one, which creates a difference, e.g., vehicles running on batteries instead of fuel. This de-novo approach has made vehicles less polluting and reduced their operational costs.

8. **Importance of Innovation.** The importance of Innovations arises due to the following reasons:-

- (a) Helps improve existing models and hence, quality of life in areas such as medicine, transportation, communication and other fields.
- (b) Provides new solutions to complex problems, such as finding renewable energy sources to combat climate change. New Energy-efficient technologies using sustainable approaches can help protect natural resources for future generations.
- (c) Keeps businesses and countries competitive in a rapidly changing world by developing enhanced products, improving services or optimizing processes
- (d) Drives economic growth and improves the quality of life by development of better products and services.

Creative Thinking Techniques

9. To be innovative, one has to learn to think creatively. **Creative Thinking is the ability to apply ones brain power to find solutions to an existing problem.** To translate initial ideas into final outcomes or solutions, it is essential that generated ideas are followed up in a structured manner. There are several ways to do so, such as Brainstorming, the Mind Mapping Technique, Bubble Map and SCAMPER Technique.

10. **Brainstorming.** This involves rapid generation of ideas, without initially categorising them as good or bad. Aim is to think freely and come up with as many ideas as possible. This method involves following four steps: -



(a) **Step 1: Set Your Focus.** Begin by defining the problem or topic to be brainstormed. What's the challenge that's being addressed? Make it clear and specific. Whether brainstorming individually or in a group, having a well-defined aim ensures everyone focusses on the same.

(b) **Step 2: Gather New Material.** Take time to familiarise with the area of focus. Research related information, gather relevant data and explore existing solutions. This step helps build a foundation for generating ideas. Remember, even seemingly unrelated material can spark creativity. So, don't hesitate to explore diverse sources.

(c) **Step 3: Generate Ideas.** Now comes the heart of brainstorming, idea generation. Amongst the many techniques available, the following two are the simplest:-

(i) **Brain Writing.** In this technique instead of verbal discussions, the ideas are written on paper. The paper is then passed around in a group, allowing others to build upon or modify existing ideas.

(ii) **Rapid Ideation.** In this a timer is set (say, 5 minutes) and as many ideas as possible, are recorded without overthinking.

(d) **Step 4: Testing the Ideas.** Once a list of ideas is ready, they're evaluated and their feasibility, impact & alignment with goals is considered in the following manner:-

(i) First, the ideas are put to following questions:-

- Is this idea practical?
- Does it address the problem effectively?
- Can it be implemented using the available resources?

(ii) Second, the promising ideas amongst the lot are chosen either by individual vote or by group vote. Then the selected ideas are further refined by combining, modifying or expanding them.

11. **Core Concepts.** The core concepts of brainstorming which should be remembered are as follows:-

(a) **Reserve Judgement.** To encourage free thinking within a group, immediate evaluation of Ideas and passing a judgment should be avoided. Let the Ideas flow naturally and leave their evaluation to later.

(b) **Quantity over Quality.** Initially, a large number of Ideas should be aimed at. Quality-ideas can emerge later in the process.

(c) **Listen to all Ideas.** Input from all participants in Creative Thinking should be sought and given a patient listening so that a large number of Ideas are obtained.

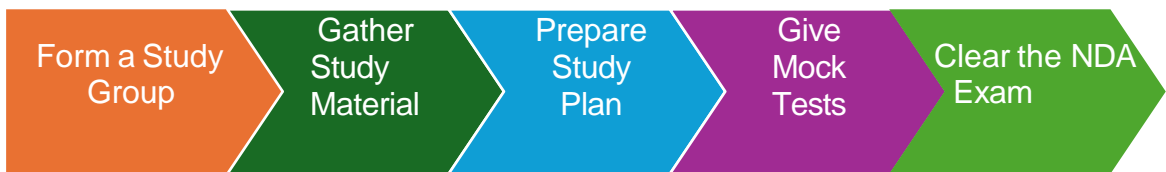
(d) **Think Outside the Box.** Radical and out-of-the-box ideas that do not confirm to the existing thought process or practices, should be encouraged.



Mind Mapping Techniques

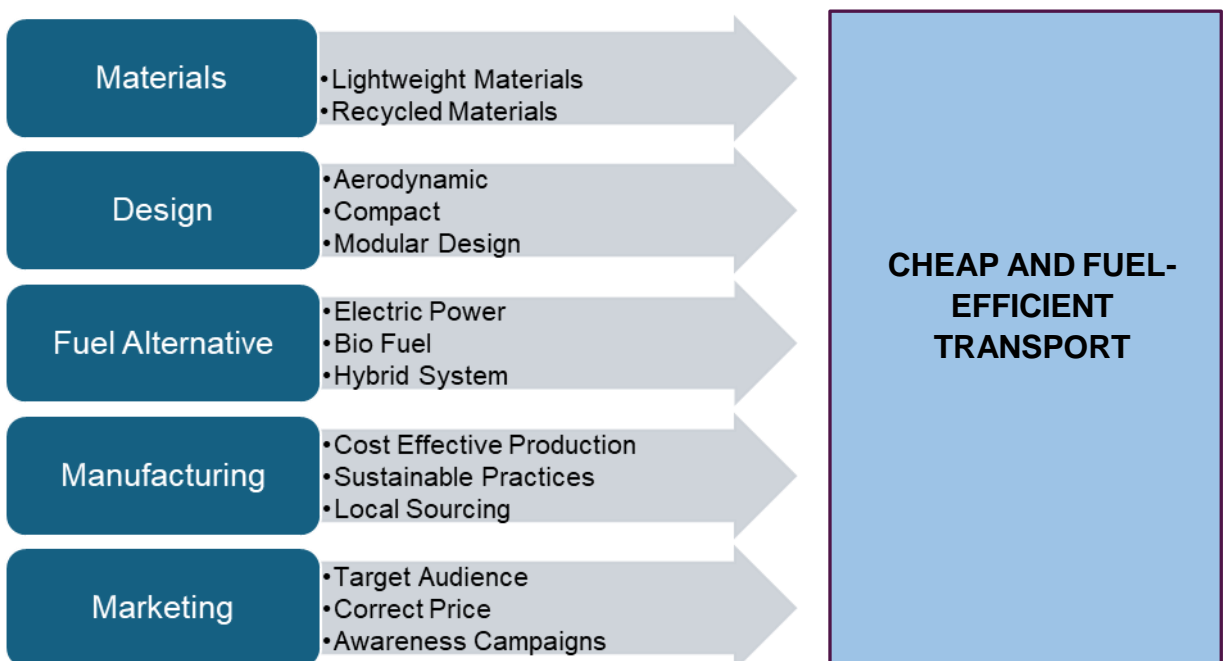
12. Following two forms of Mind Mapping techniques are commonly practised: -

(a) **Simple Mind Map**. This technique is best for first timers and for ideas that need developing. The simple mind map template centers around a main topic, goal, or problem. It provides a shared visual space where ideas are put down—whether on paper or on an online whiteboard. During brainstorming, ideas flow and branch into subtopics. This type of mind map can be used to break down a large problem/project into smaller pieces or individual steps. Handling these individual steps makes it easier for Innovators to find solutions to a problem.



Simple Mind Map to Crack NDA

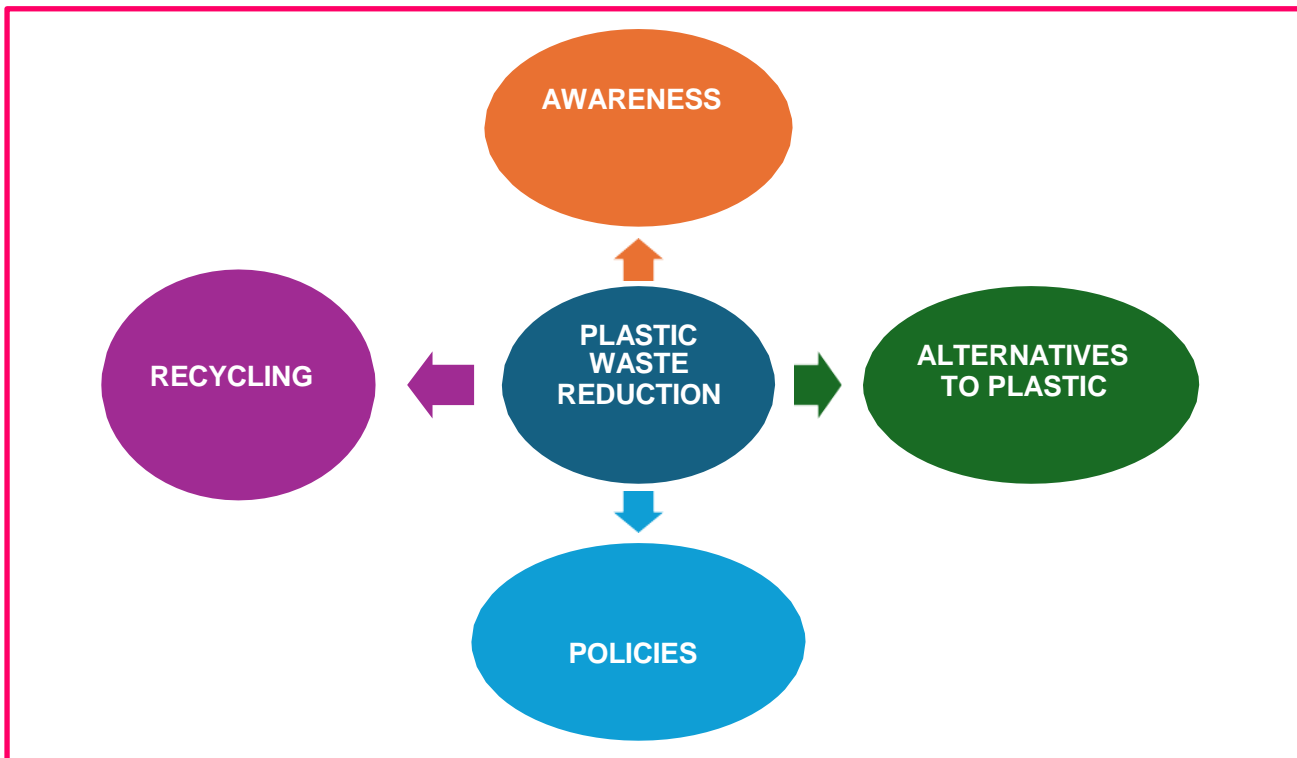
(b) **Example**. How would a Simple Mind Map for Innovation cheap and fuel-efficient Transportation look like? Creative thinking would indicate that in order to design cheap and fuel-efficient transportation, firstly materials used to create a vehicle will have to be worked upon. Then the design of the vehicle should be such that it should be efficient and compact. The fuel used to operate should also be cheap and easily available, so batteries or bio fuel based vehicles can be an alternative. Next comes the manufacturing process, which should also be cost, energy and material efficient. Finally, the Marketing of the vehicle also has to be worked out to target the right customer by offering the correct price.



Mind Map to Create Cheap and Fuel Efficient Transport



(c) **Bubble Map.** This technique is best for early-stage planning and collaborative brainstorming. It focusses on core ideas without necessarily diving into subcategories. During early brainstorming sessions, core ideas are laid out. Once suggestions from all members are taken, either roles are assigned or a project plan is created. E.g. to find Innovations to reduce plastic waste, it would be necessary to include solutions encompassing recycling, alternatives to plastic, improving public awareness against generating plastic waste, and creating policies that protect the environment from plastic waste. Thus, a Bubble Map would appear as shown below.



Bubble Map for Reducing Plastic Waste

SCAMPER Technique

13. SCAMPER Technique is an effective tool to find out solutions for problems without restricting to any specific direction and searching options through seven different dimensions. Each letter in SCAMPER represents a particular approach :-

- (a) **Substitute.** Determine what is replaceable and swap out elements to create something novel.
- (b) **Combine.** Blend different concepts or features to produce what is desired.
- (c) **Adapt.** Borrow ideas from other contexts and tweak existing solutions to solve the problem.
- (d) **Modify.** Play with dimensions, colors, sizes, or processes. Experiment to see what happens.
- (e) **Put to Another Use.** Think to use a given object in another way .



(f) **Eliminate**. Trim the non-essentials and remove them without impacting overall functioning.

(g) **Rearrange**. Shuffle the pieces. E.G. Like Automotive companies rearrange parts such as Front Grill or Lights, to create a new-look model.

14. **Example**. Using the SCAMPER Technique to find Innovative Solutions to reduce the generation of Plastic Waste:-

(a) **Substitute**. Use biodegradable materials like paper or banana tree-based products instead of plastic bags.

(b) **Combine**. Combine recycled plastic with natural fibres to create stronger and eco-friendly packaging.

(c) **Adapt**. Make plastic products reusable by designing them with durable materials and easy-to-clean features to be more environmentally friendly

(d) **Modify**. Modify plastic packaging to be thinner and lighter, reducing the amount of plastic used.

(e) **Put to Another Use**. Use plastic waste to create building materials like bricks or tiles or some other purpose.

(f) **Eliminate**. Eliminate single-use plastic items like straws and cutlery by encouraging the use of reusable alternatives.

(g) **Rearrange**. Reverse the traditional recycling process by creating a system where consumers return plastic products to manufacturers for reuse and rearrangement.

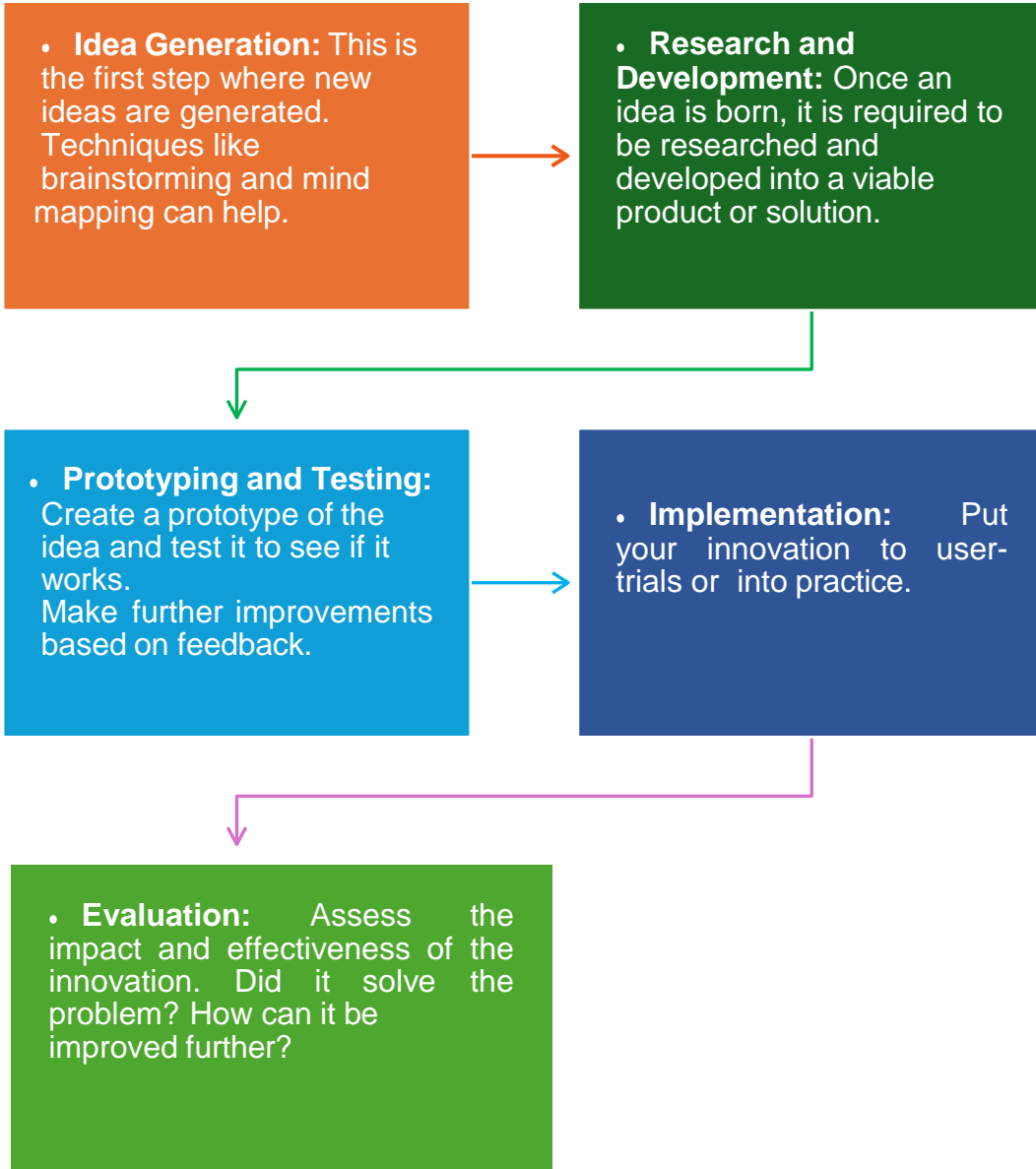
HIGHER ORDER THINKING SKILLS (HOTS)

- **Having learnt how to think creatively, apply the process to ascertain probable innovative solutions to the following problems:-**
- **Efficient disposal of House Hold waste.**
 - **Ensuring foot paths remain for the exclusive use of pedestrians.**
 - **Prevent entry of cattle and stray animals on roads.**
 - **Convert Household waste water into water suitable for use for plants.**
 - **Reduce the dust generated due to construction activity.**
 - **Creating furniture which will enable the old and disabled to sit and get up easily.**



PART II : INNOVATION PROCESS

15. Once ideas have been crystallised, then what? Is that it? Of course not, for Innovation is not just about having a great idea; it's about turning that idea into reality. Following steps help in converting ideas into inventions or innovations: -



Flow Chart: Conversion of Idea to Innovation

16. Subjecting ideas to this methodical process results in innovations that will be of practical use in the world. As a young innovator one should follow the process diligently to obtain the best possible outcome.



17. Having understood how to think creatively to generate Ideas to find solution to a problem and then put the ideas through an Innovation Process, a round-up of how to be an Innovator has been done.



18. Let these processes now be practised by undertaking a project. The intended Project should identify a problem and aim to find innovative solutions for it. The problem could be anything that needs a solution. In the HOTS section some problems have been outlined, which could be taken up. Alternatively, any of the ones listed below could also be taken up:-

- (a) **Washroom Cleanliness**. How to ensure that washrooms of your School or College remain clean throughout the day?
- (b) **Mobile Usage**. How to ensure that mobiles are used for beneficial purposes only and for a limited duration?
- (c) **Camp Waste Management**. A lot of waste gets generated during NCC Camps. What solutions can be proposed to ensure better waste management?

19. **Discussion**. After the project, the challenges faced in coming up with innovative solutions, how they were overcome and what was learnt from the experience, can be discussed.

CONCLUSION

20. While innovation as a process may be taken up specifically to find solution to problems, it isn't just the purview of engineers and scientists, nor is it limited to new-product development. It is as much applicable in daily lives, albeit on a smaller scale, wherein quick-fix solutions are generated through improvisations. Processes can be innovated, procedures or approaches can be too. Something different can be a big breakthrough, but it can also be an everyday improvement that makes the complicated a bit simpler or the expensive more affordable. The Japanese word 'Kaizen' is often used interchangeably with the idea of continuous improvement and scope to make existing things better is always there.



SUMMARY

- Innovation is crucial for enhancing existing solutions and adopting new approaches that lead to improvement.
- Innovation enables organisations to be competitive and enhances the economies of countries which promote innovations.
- Many Techniques to be creative and foster innovations exist, such as Mind Mapping Technique, SCAMPER Technique and Brainstorming Technique.
- The Brainstorming Technique involves four steps of Setting focus on the solution required to be provided, Gathering material which will assist in arriving at solutions, Generation of ideas and Testing the ideas.
- Mind Mapping Technique enables breaking down a large problem / project into smaller steps which can then be tackled individually.
- Mind Maps can be used to formalise ideas and lay them out objectively, example usage of Mind Map to innovative cheap and fuel efficient transport.
- A Bubble Map helps sub divide a larger project into components. The responsibility of tackling each component can then be divided into teams.
- Bubble Map is used to ascertain the broad heads under which one can innovate, example to find solutions to the problem of reducing plastic waste.
- SCAMPER Technique provides different approaches through Substitution, Combination, Adoption, Putting to Another Use, Modification, Elimination and Rearrangement.
- Core concepts for encouraging creativity include reserving ones judgement about an idea, quantity over quality initially, examining all ideas and thinking outside the box.
- The innovation process helps convert ideas into a product. It has five steps of Idea Generation, Research and Development, Prototyping and Testing, Implementation and Evaluation.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. Innovation is needed for

- | | |
|----------------------------------|-----------------------------|
| (a) Enhancing Existing Solutions | (b) Adopting New Approaches |
| (c) (a) & (b) | (d) Sales Promotion |

Q2. Generating a lot of ideas without judging them is a form of which technique?

- | | |
|-------------------|-----------|
| (a) Brainstorming | (b) Mind |
| (c) Scamper | (d) Agile |

Q3. How many steps does an Innovation Process generally have?

- | | |
|-------|-------|
| (a) 5 | (b) 6 |
| (c) 3 | (d) 4 |

Q 4. In the SCAMPER Technique the P stands for

- | | |
|-----------------|------------------------|
| (a) Prioritise | (b) Persevere |
| (c) Persistence | (d) Put to another use |

Q5. The Technique best suited for early stage collaboration and planning is

- | | |
|-------------|-------------------|
| a) Mind Map | b) Bubble Map |
| c) Scamper | d) Brain storming |

Q6. The importance of Innovations arises Does Not arise due to:-

- (a) Helps improve existing products and services.
- (b) Innovations are sought by the society.
- (c) It keeps businesses and countries competitive in a rapidly changing world.
- (d) It drives economic growth and improves the quality of life.

Q7. Brain writing and Rapid Ideation is used for:-

- | | |
|------------------------|---------------------|
| (a) Brain Fading | (b) Idea Generation |
| (c) Gathering Material | (d) Testing Ideas |

Q8. Gathering Material during BrainStorming enables us to:-

- | | |
|-------------------------------------|--------------------------|
| (a) To build a foundation for Ideas | (b) Save Time |
| (c) Save Cost | (d) Immitate other Ideas |

Q9. To ensure free thinking within a group we should:-

- | | |
|------------------------|--------------------------|
| (a) Reserve Judgement | (b) Encourage discussion |
| (c) Have Limited Ideas | (d) Set a timer |



Q10. The technique that is best for first timer and for ideas that need developing:-

- | | |
|-------------------|---------------------|
| (a) Bubble Map | (b) Flow Chart |
| (c) Brain writing | (d) Simple Mind Map |

Q 11. To Blend different concepts or features to produce what you desire is a part of which approach while using SCAMPER Technique:-

- | | |
|-----------------|-------------|
| a) Substitution | (b) Combine |
| (c) Adapt | (d) Modify |

Q12. Assessing the impact and effectiveness of your innovation is done in which step of Innovation Process?

- | | |
|-------------------|-----------------------------|
| (a) Generate Idea | (b) Prototyping and Testing |
| (c) Marketing | (d) Evaluation |

Q13. While testing an Idea the following is considered:-

- | | |
|-----------------|-------------------------|
| (a) Feasibility | (b) Alignment with Goal |
| (c) Impact | (d) a, b & c |

Q 14. How many Core Concepts of Innovation exist

- | | |
|------|------|
| a) 5 | b) 3 |
| c) 4 | d) 6 |

Q 15. An idea is brought for user-trials and put into practice in which step of Innovation Process?

- | | |
|-------|-------|
| (a) 3 | (b) 5 |
| (c) 4 | (d) 6 |

Short Answer Questions

- Q1 What do you mean by Set your Focus in Brain Storming?
- Q2 What is Brain Writing?
- Q3 What are the Core Concepts of Brain Storming?
- Q4 Why is Bubble Mapping considered suitable for a Team of Innovators trying to solve a Problem?
- Q5 Why is Simple Mind Mapping technique considered suitable for first time innovators?

Long Answer Questions

- Q1 What are the steps in Brain storming?.
- Q2 What are Steps in Innovation process ?
- Q3 Explain in brief any five approaches in the SCAMPER Technique.
- Q4 Explain how did you use any of the Mind Mapping technique in your Hands On Project?
- Q5 Explain with the example of a flow chart as to how practical Innovative Solutions which can be used in the real world be found to a problem.

INNOVATION CONCEPT (JD/JW)

CHAPTER IC II: APPLICATION AND BENEFITS OF INNOVATION

“Innovation is the essence of Life , when you Innovate you create new dimensions of performance in various fields of Life”

Former President, Dr. APJ Abdul Kalam



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture
Year	:	2nd Year JD/JW
Conducting Officer	:	ANO.
<u>Training Aids</u>	:	Script/Lesson Plan; OHP, Board with Chalk/ Markers.

Time Plan

• Introduction	:	02 Mins
• Part I	:	10 Mins
• Part II	:	05 Mins
• Part III	:	10 Mins
• Part IV	:	10 Mins
• Conclusion	:	03 Mins





INTRODUCTION

1. In the previous chapter it has been learnt how to think like innovators to find solutions to existing problems. Steps of the innovation process to be applied for converting creative ideas into practical and useful solutions have also been covered. The project undertaken as per the previous topic would have provided first hand experience in being Innovators. In this chapter, problems likely to be faced as innovators and how to overcome them will be discussed. Real world applications of innovations and their benefits will also be looked at.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Insight by Cadets into their Hands on Project
- (b) Part II : Obstacles to Innovation and their Solutions
- (c) Part III : Application of Innovation Process in the Real World
- (d) Part IV : Benefits of Innovation

LEARNING OBJECTIVES

- To understand the obstacles faced by Innovators
- To ascertain the solutions to the commonly occurring problems for Innovators
- To see how the Innovation Process was applied in the real world to find solutions to problems .
- To see how the world has benefitted from Innovations

PART I : INSIGHT BY CADETS INTO THEIR HANDS ON PROJECT

2. The Hands-on Project undertaken would have steered cadets to take initial steps on their journey as an Innovator. The ensuing experience and lessons learnt in the process can be used as a knowledge base in future. Sharing the same with one another will further enhance the learning value from the endeavour.

3. Let us now share our collective experiences and begin by mentioning the problem to which we were attempting to find a solution. Then let's share how creative thinking was applied to evaluate to generate ideas and the factors considered in selecting our final idea for undertaking an innovation. Let us also discuss how the idea was converted into an innovation by applying the innovation process.

4. The project would have also put forth many obstacles in the efforts to innovate, which was an intended lesson in undertaking the project. It would have helped realise that as innovators, many problems would be encountered, and creative thinking will enable finding solutions to them.



PART II : OBSTACLES TO INNOVATION AND THEIR SOLUTIONS

5. The path to innovation isn't always easy and challenges are replete in such efforts. Some common barriers faced by innovators are given in succeeding paragraphs:-
6. **Lack of Clear Innovation Strategy.**
- (a) **Challenge.** Innovators often struggle in the absence of a well-defined strategy guiding their efforts.
- (b) **Solution.** Course be planned by developing a robust innovation strategy aligning with the goals. Identify the fields to be explored (new applications, End users/uses or processes) and how to get there. Regularly review and adjust the strategy as per the obstacles encountered.
7. **Isolation and Lack of Collaboration.**
- (a) **Challenge.** Innovators sometimes find themselves cut off from the collective brainpower of their supporters because they tend to work in isolation.
- (b) **Solution.** Seek out fellow explorers—colleagues, partners, or strangers who share interests and passion. Collaborate and bounce ideas off each other to create an innovation.
8. **Insufficient Connection with End Users.**
- (a) **Challenge.** Innovators often struggle to understand the problem statement and end-users' needs and desires. The felt need may be different from the actual one.
- (a) **Solution.** Establish a communication channel with the end users. Conduct surveys, interviews, and observations. Listen carefully to their suggestions and adjust the trajectory accordingly.
9. **Neglecting Achievements and Milestones.**
- (a) **Challenge.** Innovators sometimes forget to track progress and measure impact, which can lead to loss of motivation.
- (b) **Solution.** Define key milestones related to the innovation goals. Strive to achieve these milestones within the planned time frame and with the right resources. Celebrate small victories and recalibrate when necessary.
10. **Fear of Failure.**
- (a) **Challenge.** Many people are afraid to try new things because they fear failure.
- (b) **Solution.** Encourage a growth mindset, where failures are seen as learning opportunities.



11. **Lack of Resources.**

- (a) **Challenge.** Sometimes, limited resources can stifle creativity.
- (b) **Solution.** People are exceptional at improvising, often using unconventional means. Improvisation can often eliminate lack of resources. Learn to make the most of what is at hand.

12. **Rigid Thinking.**

- (a) **Challenge.** Being stuck in old ways of thinking prevents new ideas. Just because someone said a particular method works does not mean it is the only method that works.
- (b) **Solution.** Do not be over-influenced by other methods. Try out new ideas and objectively review how it works. New idea may be better than the existing ideas or prevalent practices.

“Startups are engines of exponential growth , manifesting the power of innovation. Several big companies today are startups of yesterday. They were born with a spirit of enterprise and adventure, kept alive by the hard work and perseverance, today they have become beacons of Innovation”.

-PM Narendra Modi.

Atal Incubation Centres

13. Seeing the importance of Innovators within the country the Government has been actively promoting innovation and entrepreneurship through various initiatives, including the establishment of **Atal Incubation Centers (AICs)**.

14. **Atal Incubation Centres (AICs)**. AICs are set up at universities, educational institutions, and corporates, among other places under the Atal Innovation Mission(AIM). These incubators are crucial in nurturing start-up businesses, helping them become scalable and sustainable enterprises. The scheme aims to provide suitable physical infrastructure, access to sectoral experts, business planning support, seed capital, and industry partnerships to start-ups. AICs focus on specific subjects or sectors, such as manufacturing, transport, energy, health, education, agriculture, water, and sanitation. In summary, these Atal Incubation Centres serve as catalysts for innovation, providing the ecosystem for start-ups to flourish.

15. Innovators wanting to translate their viable innovations into commercial products/services by becoming entrepreneurs may like to visit these incubation centres, which would provide necessary guidance, technical support, infrastructure, access to investors, networking, and facilitating a host of other resources that may be required for the start-ups to compete or scale up.



PART III : APPLICATION OF INNOVATION PROCESS IN THE REAL WORLD

16. Innovations transform & save lives and also makes them better. India as a country provides an excellent example of how innovation process was applied to undertake innovations which have transformed millions of lives. Innovations have found applications in the sectors of Finance, Health, Education as well as Technology. Some innovations have really impacted our lives in a transformative manner.

Financial Sector

17. A need was felt to enable the common Indian to have monetary exchanges without the need for carrying cash in the form of currency notes and coins. Also, it was desirable to reduce cash transactions from the point of view of security and tax evasion. The solution to this problem was created through an Innovation named the, India Digital Stack. This is a technological innovation that has simplified how we purchase goods and prove our identity to acquire various services from the Government Offices and Private enterprises. All this is done in a hassle-free manner from the comfort of our very homes, by simply using our smartphones, without the need to visit any office and stand in long queues. It consists of three layers, the Identity layer, the Payments layer and the Data Layer.

18. What has been achieved so far with the use of India Digital Stack is just the beginning. Soon enough, it is very likely that personal certificates and other important documents will also be available at the click of a button. Individual medical records and history will also be available online, enabling doctors to treat patients better. Digilocker can be considered as one step in this direction. **Visit www.indiastack.global to explore the far-reaching impact this Innovation has had.**

DID YOU KNOW ?

The Three Layers of India Digital Stack

- | | |
|--|---|
| <ul style="list-style-type: none"> ➤ <u>Identity Layer.</u> A robust digital identity is provided through the Aadhaar card. Aadhaar assigns a unique 12-digit number to every Indian resident. It's like a digital fingerprint that opens doors to various services. ➤ <u>Payments Layer.</u> Next up, we have the payments layer. That's what the Unified Payments Interface (UPI) does. UPI lets you transfer money instantly using just your phone. ➤ <u>Data Layer.</u> Data is the new gold, and India Stack provides for secure data sharing. It lets you share your financial data across | <ul style="list-style-type: none"> ➤ <u>Huge Scale of Operation.</u> <ul style="list-style-type: none"> • Over 67 billion digital identity verifications— imagine the time saved! • A whopping 14.05 trillion INR in monthly real- time mobile payments • 10 operational Account Aggregators— connecting the dots in the financial universe. (BHIM, PhonePe, etc) ➤ <u>Made In India for the World.</u>
Now, here's the cool part: India Stack isn't just for India. Sure, it was born here, but its vision extends beyond borders. Any nation—developed or emerging—can adopt similar principles. Think of it as a digital passport to the Internet Age |
|--|---|

Health Sector

19. The Indian Health Sector displayed its Innovative bent when it was needed the most, due to the threat of the COVID-19 Virus. Being denied an anti-virus vaccine by the developed nations and faced with the need to develop a countermeasure in real-time, Indian Scientists of the ICMR, NIV, and Bharat Biotech adopted the existing Vaccine technology and used Innovative approaches to design a new Vaccine called the COVAXIN, which helped vaccinate millions of citizens.

“The approval of COVAXIN for emergency use is a giant leap for Innovation and novel product development in India”

- Dr Ella Krishna , Founder Bharat Biotech

20. **Jaipur Foot**. Developed in India, Jaipur foot is like the human foot or bio-mimetic, unlike most of the western designed limbs which are activity-specific. It is a low cost, durable and highly functional Prosthetic limb. It is made by substituting conventional material with wood and rubber. It is considered a remarkable Innovation due to its affordability, improved functionality and ease of maintenance.

21. **The Jeevan Bindi**. A lifesaving Innovation for the women folk of India who suffer from Iodine deficiency. It is made by applying an Iodine coating on the back side of the Bindi, which is put on the forehead by women folk. The Iodine gets absorbed by the Skin, thus preventing Iodine deficiency.

Education Sector

22. In this sector India is making immense strides to ensure that its population even in the remotest part of the country gets access to quality education at affordable rates. Innovative Applications have ensured that education is accessible to all those who desire to get educated and it does not remain the privilege of a select few.

23. **Personalized Learning**. Artificial intelligence(AI)-powered tutors and adaptive learning platforms are transforming education. They identify individual strengths and weaknesses, recommend personalised learning paths, curate relevant content, and provide real-time feedback.

24. **Bridging the Accessibility Gap**. E-learning platforms and mobile apps are breaking down geographical barriers, bringing quality education to remote villages and underserved communities. Initiatives like SWAYAM democratise access to education.





25. **Engaging and Immersive Learning.** Virtual reality (VR) and augmented reality (AR) are creating immersive classroom experiences. Students can dissect a frog in VR or explore the pyramids in AR. Gamification techniques make learning fun and increase student engagement.

Technological Innovations in Space

26. In 2013, India's Mars Orbiter Mission (Mangalyaan) made headlines as Asia's first Mars orbiter and the most economical mission till then, largely due to the innovative techniques adopted. At that time, India did not possess a Geo Synchronous Launch Vehicle(GSLV) but only the Polar Satellite Launch Vehicle(PSLV), which not only lacked enough rocket power to blast directly out of Earth's atmosphere and gravitational pull, but could also carry less loads than the former. Indian scientists chose to use the 'Slingshot Method' to projecting the rocket to enter the Martian gravitational orbit. This method of launch reduced the requirement of fuel for the rocket, which brought down its cost manifolds and also allowed carriage of more payloads without cost accretions. The cost of India's Mangalyaan Mission was far lesser than its western counterparts, even lesser than the Hollywood Movie, The Martian.

<u>INTERESTING FACTS</u>		
<u>COUNTRY</u>	<u>MISSION/ MOVIE</u>	<u>COST</u>
USA	NASA ,Maven Mars Mission	USD 671 Million
EUROPEAN UNION	ESA ,Mars Express	USD 164 Million
USA	The Martian(Film)	USD 108 Million
INDIA	ISRO, Mangalyaan	USD 74 Million

27. From the table given above it can be seen how the novel approach adopted by ISRO's scientists led to sending a mission to Mars at approximately 89% lesser cost as compared to NASA. This was the direct result of adopting an innovative idea, using a completely different approach to one followed by most, yet meeting the intended aim. Such strategies have made ISRO's launches very economical, lending competitive edge.

National Innovation Foundation

28. **National Innovation Foundation.** The National Innovation Foundation(NIF) is a Govt of India initiative that has been earnestly scouting and documenting technological ideas and innovations of the people at the grassroots and school students from all parts of the country to identify the novel innovations and practices to be taken forward for incubation.

29. The NIF team has scouted and documented over 300,000 innovations through the 'Shodhyatras', campaigns, Biennial Competitions, etc. NIF supports these innovations by enhancing their value through research and development, design improvement,



prototyping, testing, helping in patent applications, dissemination and diffusion of these innovations and helps in technology transfer and business incubation. A number of grassroots technologies supported by NIF are now commercially available, significantly improving the lives of many people. Budding innovators may like to contact this agency for support and guidance. Link- <https://nif.org.in/>

HIGHER ORDER THINKING SKILLS (HOTS)

- **What is the 'Slingshot Method' of Rocket propulsion for interplanetary move?**
- **What are some of the noticeable innovations under the Atal Innovation Mission (AIM)?**

PART IV : BENEFITS OF INNOVATION

30. Globally and in the Indian context, Innovations have immensely benefitted mankind as a whole. Key benefits of Innovations are mentioned in succeeding paras.

Benefits of Innovation

31. **Economic Growth**. Innovations lead to the creation of new industries and job opportunities. The advent of Computers paved the way for an entire industry, the Information Technology(IT) industry. Computers have also improved efficiency and productivity in various sectors. Overall, Innovations have facilitated economic growth due to Job creation and improved productivity.

32. **Improved Quality of Life**. Healthcare Innovations in medical technology lead to better diagnosis, treatment, and prevention of diseases. Everyday conveniences, such as smartphones and smart home devices, enhance our daily lives.

33. **Environmental Sustainability**. Innovations in renewable energy such as solar, wind, and other renewable energy sources reduce dependence on fossil fuels. New technologies in Waste Management, such as conversion of waste to energy help recycle and reduce waste, promoting environmental sustainability.

34. **Social Impact**. Innovative educational tools and platforms provide access to quality education for people worldwide. Even the underprivileged have access to quality education through online platforms. Advances in communication technology have connected people globally, fostering collaboration and understanding.

35. **Competitive Advantage**. Companies that innovate stay ahead of the competition and capture new markets. The Indian Automobile Industry has shown how Innovatively they have been able to provide quality products that are competitive enough to challenge the much more established players in the sector. The Indian Automotive Industry is growing rapidly and is successfully capturing substantial market share internationally.



CONCLUSION

36. Innovation has been an integral part of human progress for centuries and has the potential to benefit not only individuals, but also societies, communities and mankind in a variety of ways, including economically, socially, and environmentally. The range of problems that seem ordinary are extraordinary and have been solved with out-of-the-box thinking and limited resources by innovators. In India, innovations and practices emerging from normal people at the grassroots level, students, and traditional knowledge holders are continuously making a profound impact on society and raising the country's profile in leaps and bounds.

SUMMARY

- Hands On Project. The projects undertaken were discussed to ascertain the problems faced and methods to overcome them.
- Obstacles for Innovators. The major problems faced include Fear of Failure, Lack of Resources, Lack of clear Innovation strategy, Rigid Thinking, Isolation and Lack of customer connect.
- Govt of India has established Atal Incubation Centers in Universities to help budding innovators to walk the exciting path of being an Innovator.
- Applications of Innovation in Real World. India has a number of Innovations to boast of in Financial Sector, Health Sector, Education Sector and Technology Sector. Notable Innovation include the India Digital Stack, COVAXIN, Jaipur Foot, Mars Orbiter Mission.
- Benefits of Innovation. Innovations have contributed in economic growth, ensured environmental sustainability and improved overall quality of life.



ASSESSMENT EXERCISES

Multiple Choice Questions

Q1. Lack of collaboration amongst Innovators arises due to:-

- (a) Innovators tend to Isolate themselves
- (b) Poor communication
- (c) Secrecy
- (d) Insecurity

Q2. Innovators sometimes forget to track progress and measure impact due to:-

- (a) Neglecting Measures and Milestones
- (b) Forgetfulness
- (c) Fear of Failure
- (d) Rigid thinking

Q3. Improvisation can often eliminate:-

- (a) Fear of Failure
- (b) Rigid Thinking
- (c) Lack of Resources
- (d) Isolation

Q4. The costliest mission to Mars has been launched by:-

- (a) India
- (b) Japan
- (c) European Union
- (d) USA

Q5. Of which layer of the India Digital Stack is the popular United Payment Interface part of?

- (a) Data Layer
- (b) Identity Layer
- (c) Payment Layer

Q6. When was the Mars Orbiter Mission launched in India?

- (a) 2020
- (b) 2013
- (c) 2024
- (d) 2022

Q7. What is the name of the Indian Covid Vaccine?

- (a) Sino Vac
- (b) COVAXIN
- (c) Covishield
- (d) Gocorona

Q8. What does Jeevan Bindi eliminate?

- (a) Need for Cosmetics
- (b) Iodine deficiency
- (c) Mosquitoes
- (d) Calcium Deficiency



Q9. What is the Jaipur Foot?

- (a) Largest foot in Jaipur
- (b) Prosthetic
- (c) Shoe
- (d) Capital of Rajasthan

Q10. Mars Orbiter Mission used the following Innovative Technique to reduce mission cost:-

- (a) Sling Shot
- (b) Booster Tech
- (c) Powerful Rockets
- (d) Low weight

Q11. Which is the website / app of Govt of India for affordable education for all?

- (a) Vyawasayam
- (b) Drishyam +
- (c) Swayam
- (d) Padhega India

Q12. Mars Express is the name of

- a) European Train
- b) Protein Bar
- c) Espresso
- d) European Mission to Mars

Q 13. Competitive Advantage and Social Impacts are Benefits of:-

- (a) Good disciple
- (b) Frugality
- (c) Innovation
- (d) Development

Q 14. The Govt agency tasked with scouting and promoting Innovations is:-

- (a) NIF
- (b) ICMR
- (c) SWAYAM
- (d) NITI Aayog

Q 15. The full form of AIC IS :-

- (a) Atal Information Centres
- (b) Atal Incubation Centres
- (c) Atal Innovation Centres
- (d) Atal Invention Centres

Short Answer Questions

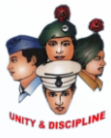
Q1. As an innovator how will you overcome the fear of failure?

Q2. How has India bridged the accessibility gap in providing quality education to all Indians?

Q3. Which are the three layers of India Digital Stack?

Q4. Why is the Covaxin unique?

Q5. What is Augmented Reality and Virtual Reality?



Long Answer Questions

- Q1. In your Hands on Project, how did you use Creative thinking to select your Idea for undertaking an Innovation?
- Q2. What Challenges did you face in converting your Idea into an Innovation during your Hands on Project?
- Q3. Explain any four obstacles for Innovators and means to overcome them.
- Q4. Explain the benefits of Innovation.
- Q5. What are Atal Incubation Centres?

PHYSICAL AND
MENTAL
WELLNESS

6

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PHYSICAL AND MENTAL WELLNESS (JD/JW)

CHAPTER PMW I : PHYSICAL FITNESS

“Sweat now, shine later”



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture and Practice
Year	:	1st Year JD/JW
Conducting Officer	:	Associate NCC Officer
Training Aids	:	Script/Lesson Plan; Computer with OHP, Screen, Pointer Staff, Presentation, Chart; Open Training Area or Ground.

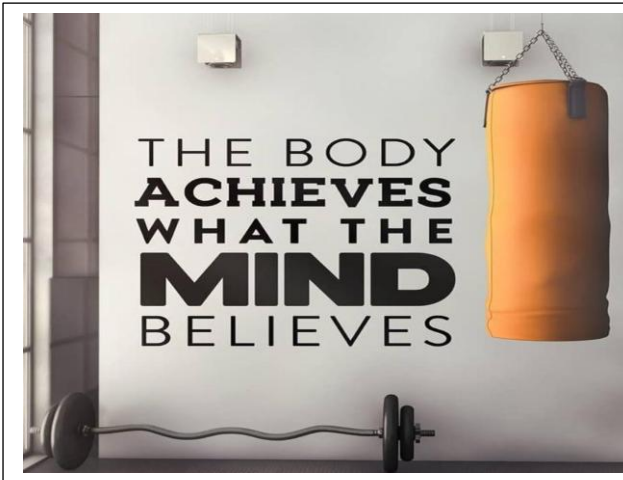
Time Plan

• Introduction	:	02 Mins
• Part I	:	06 Mins
• Part II	:	06 Mins
• Part-III	:	06 Mins
• Part-IV	:	06 Mins
• Conclusion	:	02 Mins
• Practice	:	12 Mins



INTRODUCTION

1. Physical fitness is not just about being healthy, but it is also essential for mental well-being, academic performance and future success.
2. Physical fitness enhances cognitive abilities, self-perception, and coping skills. It can improve concentration, focus, and self-esteem. Engaging in sports and exercise cultivates teamwork and leadership. Furthermore, it can reduce anxiety and promote self-reliance to navigate modern social pressures.



LEARNING OBJECTIVES

- Develop good habits
- Imbibe healthy daily routine
- Involve in outdoor activities
- Follow a healthy and nutritious diet
- Develop habit to do regular physical training

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Significance of Physical Fitness
- (b) Part II : Importance of Outdoor Activities
- (c) Part III : Staying Fit
- (d) Part IV : Steps to Physical Fitness

INTERESTING FACTS

- Life Transforming Morning Habits
 - Wake up early
 - Do Exercise
 - Sit in Silence and meditate
 - Plan your Day
 - Practise Positive Self-Talk
 - Have Dedicated Off-Screen time

PART I : SIGNIFICANCE OF PHYSICAL FITNESS

3. Regular physical activity is an excellent way to maintain physical health and enhance mental well-being. Studies demonstrate that exercise prompts the release of endorphins, the body's natural feel-good chemicals, in the brain. Even a brief, brisk 10-minute walk can boost mental alertness, energy levels, and mood. This chapter examines the importance of a regular daily routine, physical training, and recreational activities in supporting effective daily living.





4. **Physical Fitness.** Physical fitness refers to an individual's ability to perform day-to-day tasks without fatigue. It is a measure of the body's efficiency and effectiveness in work and leisure pursuits. To maintain fitness and well-being, one must engage in physical activities and adopt measures to stay physically fit.

5. **Habit.** Habits are regular routines and behaviors that people engage in, consciously or unconsciously. Positive habits help maintain motivation and make tasks easier when motivation is low. Established habits become part of daily life, requiring little effort. For instance, brushing teeth before bed is a habit that requires no extra motivation, as it has been practiced for years and is now seamless in nightly routine.

6. There are numerous ways to classify habits, such as mental, physical, or emotional; motor, intellectual, or character-building. The more beneficial, constructive, and progressive habits individuals cultivate in their life, the greater the boost to their physical, mental, and emotional well-being.



7. **Healthy Daily Routine.** A person's daily routine comprises actions and practices that structure their day. These routines can impact efficiency or cause struggle. Individuals may adopt energizing, time-saving routines or more draining, inefficient ones. The daily routine of a cadet includes morning activities, academic pursuits, evening and bedtime components. A suggested daily healthy routine can be as under :-

(a) **Morning Activities (0600-0800 hrs).**

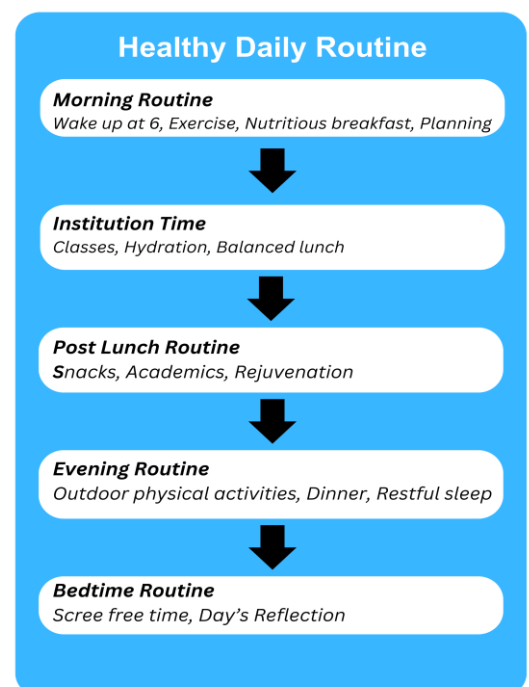
Wake up, exercise, get ready, have a nutritious breakfast and plan the day's activities by setting goals, prioritizing tasks and creating a to-do list.

(b) **Institution Time (0800-1400 hrs).**

Attend classes with active participation, maintain proper hydration and enjoy a balanced meal for lunch comprising of a mix of carbs, proteins and vegetables.

(c) **Post lunch routine (1400-1700 hrs).**

Focus on fulfilling academic responsibilities such that an effective planning can be done for preparation of examination, take nutritious snacks and include periodic breaks in your study routine, allowing for 10–15 minute intervals of physical movement, stretching, or mindful practices to rejuvenate.





(d) **Evening Activities (1700-2100 hrs)**. Undertake outdoor physical activities, eat nutritious dinner, unwind through engaging hobbies, literature, or music.

(e) **Bedtime Routine (2100-2200 hrs)**. Have a **screen-free time** for at least an hour before bedtime, reflect on the day by introspection, brush your teeth, change into comfortable clothes, and aim for **8-10 hours of sleep** to help recharge your body and mind, as is suggested for an age group of around 13 to 16 years.

8. Consistent physical activity and exercise are fundamental strategies for enhancing physical fitness, leading to a variety of benefits that go beyond the musculoskeletal system.

PART II: IMPORTANCE OF OUTDOOR ACTIVITIES

9. **Physical Education**. Physical education aims to nurture the comprehensive development of an individual. Its ultimate goal is to cultivate physical, mental, and emotional well-being in all people, while also providing them with opportunities to foster the personal and social attributes that enable them to coexist harmoniously with others and become responsible citizens.

10. **Significance of Outdoor Activities (Physical Training and Games)**. Physical fitness is essential for the physical and mental development of cadets. It boosts the immune system by increasing blood flow and adaptability to exertion. Physical training and games have a positive impact on physical health and mental well-being. The impacts are as under:-

TIPS

- **Stay Organized**. Use a planner, calendar, or app to keep track of your schedule and tasks.
- **Prioritize Self-Care**. Make time for positive activities that bring you joy and help you relax.
- **Seek Help When Needed**. Don't hesitate to ask teachers, parents, or friends for help when you're struggling with academics or personal issues.

(a) **Physical Health Benefits**. Exercise triggers the release of endorphins, improving mood and reducing stress and anxiety. Regular physical activity enhances self-esteem and can alleviate depression symptoms.

(b) **Academic Performance Benefits**. Physical activity increases blood flow to the brain, boosting concentration, memory, and problem-solving skills, leading to improved academic performance.

(c) **Development of Valuable Life Skills**. Sports and physical training teach teamwork, communication, leadership, perseverance, and goal-setting—skills essential for success in life.

(d) **Social Benefit**. Engaging in physical activities helps individuals form friendships, develop social skills, and learn to respect diversity while working toward shared goals.

Types of Outdoor Activities

11. **Physical Training(PT) and Games.** PT and Games are crucial for physical well-being, promoting teamwork, coordination. Individual sports offer a chance to exert physically; develop strength, skill, stamina and endurance. Team Games like football, kho-kho, Kabaddi, basketball etc help one develop a sense of camaraderie, shared purpose and healthy competitive spirit, facilitating social connection alongside physical exertion. Games channelise our energies in right direction, fostering health, social and personal growth. It is rightly said that 'A healthy mind resides in a healthy body.'



12. **Hobbies and Adventure Activities.** Trekking, Rafting, Rock-climbing, Cycling, Gardening, Nature-photography, star-gazing etc are some of the hobbies cadets can undertake.

13. Outdoor activities give us a break from the classroom, allowing us to explore our creativity more deeply. Classroom learning alone can limit the ability to think critically. When we experience new surroundings, we gain fresh perspectives on our world, which sparks our curiosity and inspires our creativity to address challenging questions.



14. **Benefits.** Various benefits of physical training and games are as under:-

- (a) **Improved Physical Health.** Regular outdoor activity enhances fitness and well-being.
- (b) **Mental Health Benefits.** Outdoor activities reduce stress, anxiety and depression.
- (c) **Social Skills Development.** Team sports and group activities foster communication, teamwork and leadership.
- (d) **Environmental Awareness.** Outdoor activities promote appreciation and understanding of nature.
- (e) **Building Confidence.** Overcoming outdoor challenges and achieving goals boosts self-esteem.

TIPS

- Breathe deeply and naturally while stretching.
- Don't bounce or force your muscles beyond a comfortable stretch.
- Hold each stretch for 15-30 seconds to allow for maximum relaxation of the muscles.
- Stretch regularly to maintain flexibility and range of motion.
- Listen to your body and stop stretching if you experience any pain or discomfort.



PART III : STAYING FIT

15. Physical fitness is like carefully tuning an engine. It allows us to reach our full potential, enabling us to look, feel, and perform our best in daily tasks, with energy left for leisure and emergencies. Fitness involves the heart, lungs, and muscles, and also impacts mental and emotional well-being. We can improve fitness through healthy habits, exercise, and nutrition so as to maintain overall fitness through health-related fitness and skill-related fitness.

Basic Components of Fitness

16. **Cardio-Respiratory Capability**. It is the ability to deliver oxygen and nutrients to tissues, and to remove wastes, over sustained periods of time. Methods for measuring this component include long runs and swims.

17. **Muscular Strength**. It is the ability of a muscle to exert force for a brief period of time. Upper-body strength can be measured by weight-lifting exercises.

18. **Muscular Endurance**. It is the ability of a muscle, or a group of muscles, to sustain repeated contractions or continue applying force against a fixed object. Tests like push-ups measure endurance of arm and shoulder muscles.

19. **Flexibility**. It is the ability to move joints and use muscles through their full range of motion. The sit-and-reach test is often used to measure flexibility of the lower back and upper legs.



Cooling Down Exercises

20. **Body Composition**. It refers to the makeup of the body in terms of lean mass (muscle, bone, vital tissues, and organs) and fat mass. An optimal ratio of fat to lean mass indicates fitness, and exercise can help reduce body fat while maintaining or increasing muscle mass.

Nutrition

21. **Nutrition Basics**. Food serves as the primary energy source for the human body. There are six basic nutrients that are necessary to help support your health, even in small



amounts. These are protein, carbohydrates, fats, vitamins, minerals and water. The energy content of food is quantified in calories.

22. **Essential nutrients.** Essential nutrients are compounds the body requires trusted source to perform basic functions and grow. The six essential nutrients can be broken down into following categories:-

(a) **Macronutrients.** These are nutrients which the body requires in substantial quantities to fuel its activities and maintain its structure. It includes carbohydrates, proteins and fats. Carbohydrates are the primary source of energy.

(b) **Micronutrients.** These include vitamins and minerals that strengthen the immune system, and metabolism

(c) Water is neither a macronutrient nor a micronutrient in the traditional sense. However, it is often categorized alongside macronutrients because the body requires it in large amounts for survival.

23. **Weight Management.** A **caloric deficit/gain** is a key factor in weight management, meaning the correlation between energy(calories) consumed and expended. So, for weight management following aspects bear importance :-

(a) For weight loss, Calories consumed need to be less than Calories expended, creating a **caloric-deficit, essential for weight loss.**

(b) For weight gain, Calories consumed need to be more than Calories expended, achieving a caloric surplus.

(c) For maintaining body weight, Calories consumed and expended need to be approximately the same.

PART IV : STEPS TO PHYSICAL FITNESS

24. **Aim of PT.** The primary objective of physical training is to empower youth physically and mentally by imparting appropriate skills and knowledge, thereby enabling them to engage in a lifetime of healthy physical activities.

25. **Principles of PT.** Three main principles of PT are as follows: -

(a) **Balanced Development** - To give equal exercise to every part of the body.

(b) **Progressive Improvement** - Aim for a steady improvement rather than abrupt gains

(c) **Maintain Continuity** - To do PT consistently so that it develops into a habit.

26. **Essentials of PT.** The five golden essentials of PT are: -

(a) A good environment.

(b) Hard work.



- (c) Sound sleep.
- (d) Recreation.
- (e) Patience and satisfaction.

27. Ideally a **PT program** includes all activities from warming up to cooling down. It's a good idea to go for a run to build up stamina and endurance, followed by strengthening and stretching exercises. When it comes to doing exercises, remember to **do the lateral(sideways) ones before the dorsal(forward and back) ones**, to avoid putting of sudden pressure on the core and risk injury. Suggested structure of a 45-minute PT session is as follows :-

- (a) **Warming Up**. 04 Mins of slow jogging to prepare the body and warm up the muscles
- (b) **Running**. 10 Mins of running, ending in a sprint, for endurance and speed.
- (c) **Strength/Endurance Training**. 15 Mins of Push-ups, Pull-ups, jumping, sprints, sit-ups, rope climbing, competitive games etc for improving strength and power.
- (d) **Stretching**. 10 Mins of free stretching exercises for flexibility and mobility.
- (e) **Cooling Down**. 06 Mins of Cooling down exercises to restore the metabolism to pre-exercise state.



DID YOU KNOW ?

- You need to burn off 3,500 calories more than you take in, to lose just one pound!
- Regular physical activity can increase the size of the 'hippocampus', the part of your brain responsible for memory and learning.
- So, exercising not only improves physical fitness but also cognitive function.



28. **Freehand Exercises.** These are valuable as they boost flexibility, strength, and stamina without the need for any specialized equipment. They activate various muscle groups, improve coordination, and support joint flexibility. Since these exercises can be performed anywhere, they offer an easy and convenient way to maintain overall fitness and health. Some basic free hand exercises are: -

- (a) **Push-ups.** Strengthens the chest, shoulders, and arms.
- (b) **Squats.** Targets the legs
- (c) **Sit-ups.** Strengthens the core
- (d) **Lunges.** Focuses on the legs and glutes.
- (e) **Planks.** Engages the core, shoulders, and back muscles.
- (f) **Mountain Climbers.** A full-body exercise that enhances cardio and works the core, arms, and legs.
- (g) **Jumping Jacks.** Improves cardiovascular health and works the whole body.



29. While both PT and Games are good for fitness, their impact on the body is different. Salient points of both are as under:-

<u>PT</u>	<u>GAMES</u>
<ul style="list-style-type: none"> ➤ PT can be done by all ➤ Participation not limited by numbers ➤ Targets overall body ➤ Minimal requirement of equipment ➤ Can be done anywhere and anytime 	<ul style="list-style-type: none"> ➤ People who have knowledge and capability can participate. ➤ Only limited persons can participate as per the sport ➤ Requires more mind-body and limb-eye coordination ➤ More equipment and marking is needed for conduct ➤ Specific field/court is required

30. **Activities as Per Age, Health, Location and Weather.**

- (a) **Age-appropriate Adjustments.** Junior cadets should focus on simple exercises that build basic strength and coordination, like bodyweight squats and jumping jacks.

(b) **Health Adjustments.** Fitness routines should be adapted to accommodate cadets with injuries or chronic conditions by offering low-impact alternatives, such as swimming, cycling etc



(c) **Weather and Location Adjustments.** Areas with extreme climates or high-altitude locations, demand separate considerations and allowances in performance. For places experiencing heavy rainfall, indoor sessions in covered spaces can ensure training continues safely.

31. Following are the desired **minimum** physical standards for JD/JW cadets **on completion of their two years training:-**

Parameter/Activity	Boys	Girls
Weight (BMI)	14.5-17	14.5-18
Walking (30 mins)	3-4 km/hr	2-3 km/hr
1.6 km Running	10-12 mins	12-15 mins
2.4 km Running	14-16 mins	16-18 mins
Sit-ups	25	20
Push-ups	10-12	4-6
Plank Hold	30-45 sec	20-30 sec
Yoga	Proficiency in at least 5 Asanas	
Swimming	25 m(Any style/stroke)	

Note: These desired standards are only meant to serve as a reference guide for cadets to achieve minimum levels of physical fitness. Cadets will NOT be assessed or tested on the same.

32. In addition to above physical standards, to ensure overall physical and mental wellness, following steps can be taken on routinely:-

- (a) **Regular Exercise.** Engage in at least an hour of physical activity daily to improve strength, endurance and cardiovascular health.
- (b) **Balanced Diet.** Eat a balanced diet rich in fruits, vegetables, lean proteins, and whole grains while limiting processed foods.
- (c) **Oral Health.** Brush and floss daily, visit the dentist regularly, and avoid excessive sugar to maintain strong teeth and gums.
- (d) **Adequate Sleep.** Ensure 8-10 hrs of quality sleep each night for proper body and brain function.
- (e) **Yoga and Meditation.** Practice yoga for flexibility, and relaxation, and meditate to reduce stress and enhance focus.
- (f) **Hydration.** Drink enough water(at least 8 glasses) throughout the day to maintain energy levels.



(g) **Stress Management**. Engage in hobbies and mindfulness techniques to reduce anxiety and mental fatigue.

(h) **Limit Screen Time**. Reduce excessive phone and computer use to prevent eye-strain, stress and sleep disturbance.

ACTIVITY

- ANO is divided the cadets into groups of 10-15 and take them outdoor for carrying out Warm up, Strengthening and cooling down exercise given in the Chapter

CONCLUSION

33. This lesson equips cadets with practical knowledge and techniques to adopt a healthy life style, including structured routines, physical training and balanced nutrition. Adopting and implementing these practices can lead to long-term health benefits and personal growth.

34. Practising a healthy lifestyle enhances an individual's quality of life by boosting physical fitness. It improves heart and lung function, increases oxygen supply to body tissues, enhances muscle tone, promotes good posture and a balanced figure, fosters a positive body image, speeds up recovery from illness or injury, and reduces the risk of cardiovascular disease.

- A healthy daily routine combines adequate sleep, regular physical activity and nutritious meals.
- Physical training improves physical and mental health, discipline and endurance.
- Outdoor activities promote holistic development and reduce stress.
- Following a structured exercise routine with proper techniques prevents injuries and maximizes benefits.
- A balanced diet is essential for fueling physical activities and supporting recovery.
- Regular PT empowers the youth physically and mentally with proper skills and knowledge to enjoy a lifetime of healthy activities physically.

**ASSESSMENT EXERCISE****Multiple Choice Questions**

- Q1. What is the primary benefit of regular physical activity?**
- (a) Only physical fitness
 - (b) Only mental relaxation
 - (c) Both physical and mental well-being
 - (d) Weight gain
- Q2. What is the primary role of endorphins released during exercise?**
- (a) Increase muscle strength
 - (b) Reduce stress and improve mood
 - (c) Make you feel sleepy
 - (d) Enhance digestion
- Q3. Which of the following is NOT a component of physical fitness?**
- (a) Muscular Strength
 - (b) Cardio-respiratory Capability
 - (c) Mathematical Ability
 - (d) Flexibility
- Q4. What is the best way to manage weight?**
- (a) Eat more than you burn
 - (b) Burn more calories than you consume
 - (c) Completely avoid all fats
 - (d) Only drink water and exercise
- Q5. Which of these is a macronutrient?**
- (a) Iron
 - (b) Vitamin C
 - (c) Protein
 - (d) Sodium
- Q6. Which of the following is NOT part of an effective bedtime routine?**
- (a) Screen-free time
 - (b) Reflecting on the day



- (c) Drinking caffeine
 - (d) Brushing teeth
- Q7. What is the suggested minimum hydration practice?**
- (a) 1 glass of water per day
 - (b) 4 glasses of water per day
 - (c) 8 glasses of water per day
 - (d) Only drink when thirsty
- Q8. Which of the following best defines muscular endurance?**
- (a) Ability of muscles to apply force for a short time
 - (b) Ability of muscles to sustain repeated contractions
 - (c) Ability to lift the heaviest weight once
 - (d) Ability to move joints freely
- Q9. What is an important principle of physical training?**
- (a) Focus only on one muscle group
 - (b) Exercise randomly without routine
 - (c) Maintain continuity in training
 - (d) Avoid stretching
- Q10. Which outdoor activity is considered an adventure activity?**
- (a) Football
 - (b) Star-gazing
 - (c) Push-ups
 - (d) Running
- Q11. What is the primary benefit of team sports?**
- (a) Individual excellence
 - (b) Social skill development
 - (c) Isolation from distractions
 - (d) Increased muscle mass
- Q12. Which food group provides the primary source of energy?**
- (a) Proteins
 - (b) Carbohydrates
 - (c) Fats
 - (d) Vitamins



Q13. Which of the following is an example of a freehand exercise?

- (a) Bench press
- (b) Squats
- (c) Treadmill running
- (d) Cycling

Q14. Which of the following routine must be practiced for at least 8-10 hours?

- (a) Devotion to social media
- (b) Work-out
- (c) Sleep
- (d) Food preparation

Q15. Which factor is NOT considered while planning physical activities?

- (a) Age
- (b) Health conditions
- (c) Weather
- (d) Favorite color

Short Answer Questions

- Q1. What is Healthy Daily Routine?
- Q2. What are Habits?
- Q3. What are Macronutrients?
- Q4. What is the aim of PT?
- Q5. What is muscle endurance? Give two exercises which help in measuring muscle endurance.

Long Answer Questions

- Q1. Discuss the significance of physical fitness.
- Q2. Briefly describe the importance of outdoor activities.
- Q3. Explain in detail how does a person stay fit.
- Q4. Briefly discuss the term PT.
- Q5. Give a suggested break up of 45 minutes of PT.



PHYSICAL AND MENTAL WELLNESS (JD/JW)

CHAPTER PMW II : IMPORTANCE OF HYGIENE AND SANITATION

"Sanitation and cleanliness are among the humblest of the civic virtues, and it is easy to underestimate their significance."

Former President, Shri Ram Nath Kovind



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 1st Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/Lesson Plan: Computer with OHP, Screen, Pointer Staff, Presentation, Charts/posters.

Time Plan

- Introduction : 03 Mins
- Part I : 04 Mins
- Part II : 15 Mins
- Part-III : 10 Mins
- Part-IV : 05Mins
- Conclusion : 03 Mins





INTRODUCTION

1. Maintaining hygiene and sanitation is essential for overall health and well-being. This chapter explores the importance of personal, oral, and food hygiene, as well as camp sanitation. Personal hygiene includes practices such as bathing, handwashing, and grooming. Oral hygiene, which involves caring for teeth and the mouth, prevents dental issues and supports overall health. Food hygiene ensures food safety and prevents contamination, protecting against foodborne diseases.
2. Camp sanitation is crucial for groups in close quarters, such as NCC camps, to maintain cleanliness and prevent the spread of infectious diseases. By adopting proper hygiene and sanitation practices, individuals can reduce the risk of disease, promote healthier lifestyles, and create a safer environment for themselves and others.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Importance of Hygiene and Sanitation
- (b) Part II : Personal, Oral and Food Hygiene
- (c) Part III : Camp Sanitation
- (d) Part IV : Dos and Don'ts

INTERESTING FACTS

- Soap comes from the Roman word "sapo," meaning "fat" or "oil."
- The first toothbrush with nylon bristles was introduced in 1938
- The term Hygiene is derived from the word Hygeia, representing the Greek Goddess of health, cleanliness, and sanitation.

LEARNING OBJECTIVES

- Comprehend the basics of Hygiene and Sanitation
- Comprehend the basics of Personal, Oral and Food Hygiene
- Learn about common problems caused by poor hygiene
- Understand the importance of food safety from production to consumption
- Learn about foodborne diseases and prevention methods
- Cater for aspects of sanitation of camp during recce of camp site
- Ensure sanitation of cook house, water-point and living area



PART I : IMPORTANCE OF HYGIENE AND SANITATION

3. As NCC cadets, maintaining hygiene and sanitation is vital for your health and performance. These practices prevent disease, promote cleanliness, and create a positive environment.
4. **Hygiene**. Hygiene encompasses practices like bathing, handwashing, and grooming (trimming hair and nails) to promote health. According to WHO, hygiene refers to "conditions and practices that help maintain health and prevent the spread of diseases."
5. **Sanitation**. Sanitation involves water quality, sewage treatment, and public health. It includes tools and actions that maintain a clean environment and helps prevent diseases like roundworm infections caused by infected faeces. Stopping open defecation eliminates such infections and more serious ones like E. coli.
6. **Importance of Hygiene and Sanitation.**
 - (a) Crucial for personal, social, psychological, and health reasons.
 - (b) Proper hygiene and sanitation prevent diseases and infections.
 - (c) Maintaining good personal and environmental hygiene significantly reduces many diseases.
 - (d) It involves not just personal hygiene but also avoiding littering and open defecation to promote better health and quality of life.
7. **Hygiene of the Society**. Societal hygiene is as important as individual hygiene. The cleanliness of our environment and the hygiene practices of those around us influence our hygiene standards.
8. Overcrowded areas lacking sanitation facilities and with accumulating garbage create unhygienic environments, impacting residents, particularly slum dwellers. Individual hygiene practices alone are insufficient in such circumstances; the entire community must adopt hygienic practices to maintain a clean environment.

PART II : PERSONAL, ORAL AND FOOD HYGIENE

9. **Personal Hygiene**. Personal hygiene is essential for maintaining health and well-being. It involves keeping the body, clothing, and surroundings clean to prevent illnesses and promote confidence.
10. **Key Aspects of Personal Hygiene.**
 - (a) **Body Cleanliness**. Bathe regularly, use soap and shampoo, and focus on areas prone to sweat and bacteria.
 - (b) **Oral Hygiene**. Brush twice daily, floss, and use mouthwash.



- (c) **Hand Hygiene**. Wash hands with soap, especially after using the restroom and before meals.
- (d) **Hair and Scalp Care**. Wash hair regularly to maintain cleanliness.
- (e) **Nail Care**. Keep nails clean and trimmed.
- (f) **Clothing and Laundry**. Wear clean clothes and wash them frequently.
- (g) **Foot Care**. Wash feet daily, dry them well, and trim toenails.
- (h) **Genital Hygiene**. Maintain proper hygiene, particularly during menstruation and urination.



11. **Importance of Personal Hygiene.**

- (a) **Prevents Illnesses**. Reduces disease transmission.
- (b) **Boosts Confidence**. Enhances self-esteem and confidence.
- (c) **Maintains Physical Health**. Prevents body odour, acne, and fungal infections.
- (d) **Promotes Mental Well-being**. Reduces stress and anxiety.
- (e) **Respects Others**. Shows consideration for those around you.

12. **Practices Performed by Individuals to Maintain Good Personal Hygiene.**

Some daily habits to maintain personal hygiene and prevent diseases are as under:-



Morning Routine

- **Wake-up Wash.** Wash your face, hands, and mouth when you wake up.
- **Brush and Floss.** Brush your teeth at least twice a day and floss once a day to maintain good oral hygiene.
- **Wash Hands.** Wash your hands with soap and water after using the toilet, before eating, and after blowing your nose,

Bathing and grooming

- **Shower or Bathe.** Shower or bathe at least once a day, using soap and shampoo to keep your body clean.
- **Wash Hair.** Wash your hair regularly, depending on your hair type and lifestyle.
- **Trim Nails.** Trim your fingernails and toenails regularly to keep them clean and tidy.

Hand Hygiene

Wash Hands Frequently. Wash your hands with soap and water frequently throughout the day.

Foot Hygiene

Wash Feet: Wash your feet daily, paying special attention to the areas between your toes.
Dry Feet: Dry your feet thoroughly, especially between the toes.

ADDITIONAL HABITS

- **Wear Clean Clothes:** Wear clean clothes every day, and wash clothes regularly.
- **Use Clean Towels:** Use clean towels to dry yourself after bathing or showering.
- **Cover Mouth and Nose:** Cover your mouth and nose when coughing or sneezing to prevent the spread of germs.
- **Avoid Touching Your Face:** Avoid touching your face, especially your eyes, nose, and mouth, to prevent the spread of germs.

Oral Hygiene

13. **Oral hygiene.** Oral hygiene ensures a healthy mouth, teeth and gums, preventing dental issues and infections.

14. **Key Aspects of Oral Hygiene.**

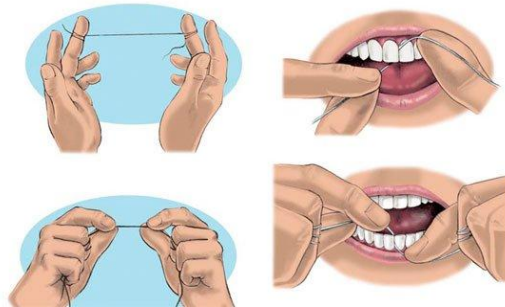
- (a) Brush teeth at least twice daily using a fluoride toothpaste. It helps remove bacteria and freshens the breath.
- (b) Floss daily to remove plaque and food particles.
- (c) Rinse with water or mouthwash to keep the mouth fresh.
- (d) Use a tongue scraper to remove bacteria.
- (e) Visit the dentist regularly for check-ups and cleanings.

15. **Consequences of Poor Oral Hygiene.**

- (a) Tooth decay and cavities
- (b) Gum disease and tooth loss
- (c) Bad breath (halitosis)
- (d) Gingivitis and Periodontitis
- (e) Increased risk of systemic diseases like heart disease and diabetes.



Brushing



Flossing

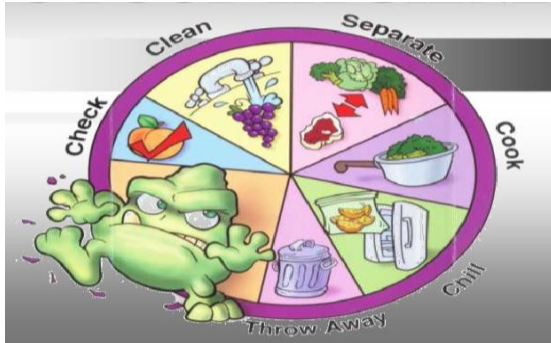
Food Safety

18. **Food Safety.** Food safety involves proper handling, storage, and preparation to prevent contamination and foodborne illnesses.

19. **Key Aspects of Food Safety.**

- (a) **Handling & Storage.** Store food properly to prevent contamination.
- (b) **Temperature Control.** Maintain safe cooking and storage temperatures.

- (c) **Personal Hygiene.** Wash hands before handling food.
- (d) **Cleaning & Sanitation.** Regularly clean utensils and surfaces.
- (e) **Food Inspection.** Check for spoilage before consumption.



20. **Prevention of Foodborne Diseases.**

- (a) **Cook Food Thoroughly.** Kill bacteria with proper cooking temperatures.
- (b) **Refrigerate Promptly.** Prevent bacterial growth by storing food correctly.
- (c) **Avoid Cross-Contamination.** Keep raw and cooked foods separate.
- (d) **Avoid Raw or Undercooked Foods.** Avoid consuming raw or undercooked foods, especially for vulnerable populations such as the elderly, pregnant women, and young children.
- (e) **Stay Informed.** Be aware of food recalls and safety alerts.

21. **Common Foodborne Diseases/Conditions.** Bacteria, virus, parasites or toxins may cause the following:-

- (a) Diarrhoea
- (b) Abdominal and Stomach Cramps
- (c) Urinary Tract Infections
- (d) Pneumonia
- (e) Vomiting and Fever

Food Safety and Hygiene in Daily Life

22. Food safety and hygiene are vital for anyone handling food in the kitchen.

- (a) **Avoiding Cross-contamination.** Use separate cutting boards for raw meat and vegetables.

Serving Safe Food is My Responsibility **I Follow 12 Golden Rules of Food Safety!!**

Hygiene Rule Codes		Hygiene Rule Codes	
1	Keep kitchen premises clean and free from pests and rodents	7	Wear clean clothes, apron, cap and gloves
2	Use potable water for cooking and washing raw food	8	Wash hands before handling food, after using toilet & after every 2 hours
3	Cook food thoroughly. Keep hot food hot and cold food cold	9	Use waterproof bandage to cover cuts or burn wounds
4	Handle and store veg & non veg, raw & cooked food separately	10	Do not handle food when unwell
5	Keep food covered. Hold food at room temperature for maximum 2½ hours	11	Use clean dusters to wipe utensils and clean surface
6	Use separate utensils, knives, etc. for raw & cooked, veg & non veg food	12	Keep dustbins covered



- (b) **Safe Storage Practices**. Refrigerate perishables within two hours.
- (c) **Mindful Ingredient Sourcing**. Source ingredients from reliable suppliers.
- (d) **Regular Hand Hygiene**. Wash hands thoroughly before food preparation.

23. By maintaining personal hygiene, oral care, and food safety, we can significantly reduce health risks, promote well-being, and create a safer environment for all.

PART III : CAMP SANITATION

24. Hygiene and sanitation are critical for maintaining the health and well-being of cadets during NCC training camps. Proper planning and discipline in these aspects ensure a safe and efficient training environment while preventing diseases and health hazards.

Preliminary Recce for Selection of Camp Sites

25. Before a camp begins, a reconnaissance (recce) is conducted about four months in advance to ensure a suitable site is chosen. The ideal camp location should:

- (a) Be accessible by road or rail.
- (b) Be away from populated areas to prevent disturbances.
- (c) Have level ground with adequate built-up structures for accommodation and storage.
- (d) Provide open space for training activities.
- (e) Be free from water hazards, pests, and epidemic diseases.
- (f) Have a reliable water source and proper drainage.

26. **Move to Camp and Setup**. An advance party arrives four days before the camp starts to set up essential facilities, including :-

- (a) **Sanitation and Hygiene**. Cleaning the area, marking camp layout, and establishing water points and bathing facilities.
- (b) **Living Arrangements**. Setting up accommodation, cookhouses, offices, storage areas, and medical rooms.
- (c) **Security and Coordination**. Collaborating with local authorities for necessary services and ensuring camp safety.

Camp Hygiene and Sanitation

27. Sanitation means keeping the living area and its surroundings neat and clean. This involves removal of waste products and refuse. Maintaining hygiene during camps is crucial for the health and efficiency of cadets. Certain important aspects are given in succeeding paragraphs.



28. **Cook House.** The quality of food in the Camp should be of high standard and purchased from authorised or reputed dealers. All precautions should be taken to ensure that no case of Food Poisoning occur in the Camps. A sample of food provided to cadets will be preserved for 36 hours after the meal is served.
29. **Cooking and Serving of Food.** The following points need attention: -
- (a) All preliminaries, such as, cutting, peeling and washing of food items will be done in a separate room. Proper preparation tables, cutting and chopping blocks will be used for the purpose
 - (b) The cooked food should be served hot and so timed that food is ready just a few minutes before distribution.
 - (c) Regular inspection of the hygiene, sanitation and cleanliness of the cook house staff and utensils should be carried out.
 - (d) Avoid over peeling, use of excessive oil, condiments, salt and sugar.
 - (e) If food is being out-sourced, it should be from approved vendors, stored hygienically, cooked properly, and served hot.
 - (f) Waste food disposal must be systematic to avoid pests and contamination.
30. **Soakage Pits.** Each cook house will have soakage pit, 6 feet deep and 4 1/2 feet wide. These pits will be fly-proofed, filled with lime stone/brick and covered with a top layer of earth. Waste food will be buried in refuse pits which will be located away from the cook houses.
31. **Water Points.** Water used in the Camp must be from authorised source and must be checked by the local medical authority and certified as potable. Chemical for water treatment should be procured depending on requirement. Emphasis be laid on the following:-
- (a) Cleanliness of the water containers and the surroundings be ensured.
 - (b) Proper drainage facilities/soakage pits to avoid stagnation of water.
 - (c) Wherever possible, provision of RO plant should be ensured for drinking water.
32. **Personal and Camp Hygiene.**
- (a) **Personal Hygiene.** Cadets must maintain personal hygiene by bathing regularly, washing hands before meals, and wearing clean clothes.
 - (b) **Clean Living Spaces.** Living spaces should be kept dry, ventilated, and free from clutter.



- (c) **Proper Waste Disposal.** Waste must be disposed of in designated areas using covered bins.
- (d) **Clean Toilets.** Toilets and bathing areas should be cleaned regularly, with proper drainage systems in place.
- (e) **Cookhouse Sanitation.** Cookhouse sanitation must follow strict rules, including handwashing stations, food inspections, and waste management.

33. **Discipline and Responsibility of Cadets.**

- (a) Every cadet is responsible for keeping their surroundings clean.
- (b) Camp hygiene activities, including waste disposal and area maintenance, should be followed diligently.
- (c) Reporting hygiene or sanitation concerns to authorities ensures the well-being of all cadets.

34. Hygiene and sanitation are essential components of NCC training camps, ensuring cadets remain healthy, disciplined, and focused on their training. A well-maintained camp fosters teamwork, morale, and efficiency, contributing to a successful and enriching NCC experience.

35. **Camp Latrines.** Built-up accommodation may not always be available and camps may have to be conducted in open/field conditions, necessitating digging of latrines. Camp latrines are of following types:-

- (a) **Deep Trench Latrines(DTLs).** A pit three feet wide, at least eight feet deep and of a length suitable to the requirement is constructed and wooden seats placed over it with proper partitions and curtains. Soil may necessitate reverting of sides with sand bags, bamboos or wire netting. On vacation of camp, these are filled up with soil to assist in disintegration and prevent breeding of flies.
- (b) **Shallow Trench Latrines.** For camps of less than a week's duration, dig a row of trenches in parallel, each trench being 3 feet long, 1-foot-wide and 2 feet deep. Each trench should be 2 feet apart. The ratio is 5 trenches for the first hundred users and three for each subsequent hundred. After defecation, the excreta are covered with loose earth with a shovel or a scoop. These trenches are filled up after 24 hours and new trenches are dug up.
- (c) **Urinals.** The most common urinals used for camps are the Funnel Urinals which are constructed over a simple soakage pit.

36. DTLs of proper specifications will be constructed and covered by proper latrine frames. Latrines will be smoked every morning. The wooden frames will also be washed twice a day and treated with lime. Partition screens will be erected for each latrine seat.



Night Latrines will be earmarked and lighting provided. Sufficient urinals should be provided within the camp area. These will be treated daily with creosote and lime quick. proper security ensured.

HIGHER ORDER THINKING SKILLS (HOTS)

- **What are the possible consequences of not washing hands regularly? Analyse the situation and explain your answer.**
- **Compare and contrast the importance of personal hygiene in rural and urban areas, with examples.**
- **How does poor hygiene contribute to the spread of diseases? Explain the chain of events that leads to the spread of diseases.**

PART IV : DOs AND DON'Ts IN CAMPS

37. Do's.

- (a) Wash hands or use hand-sanitiser, especially after coughing/sneezing.
- (b) Brush and floss teeth daily.
- (c) Sanitise food preparation areas.
- (d) Clean surroundings regularly.
- (e) Wash hands before and after having food.
- (f) Take only that much quantity of food which you can eat, avoid wastage.
- (g) Wear clean clothes and undergarments, wash them daily.

38. Don'ts.

- (a) Avoid sharing personal hygiene items (e.g., towels, toothbrushes).
- (b) Don't leave food uncovered or improperly stored.
- (c) Avoid littering camp areas, make use of dustbins/refuse pits.
- (d) Never use untreated water for drinking or cooking.
- (e) Don't clog the washbasin/utensil-washing area with waste food.
- (f) Don't spit casually, respect your surroundings.
- (g) Don't go to non-designated areas for ablutions.



CONCLUSION

39. Adequate sanitation, together with good hygiene and safe drinking water, are fundamental to good health and to social and economic development. Maintaining personal & oral hygiene and ensuring food safety leads to healthy outcomes and promotes environmental sustainability. Additionally, maintaining high hygiene standards fosters a sense of inter-personal respect, creating a cohesive and supportive community. Recognising the link between cleanliness and physical & mental well-being underscores the importance of promoting hygiene and sanitation as a favoured approach towards life.

40. By instilling a culture of hygiene consciousness through training and reinforcement of proper hygiene protocols, cadets can better protect themselves and fellow cadets from preventable illnesses. Prioritising personal hygiene in camps not only boosts individual health but also plays a crucial role in maintaining good physical, mental health and high morale for undergoing training.

SUMMARY

- Hygiene and sanitation practices help prevent the spread of diseases, promote cleanliness and foster a positive and respectful environment.
- Personal hygiene prevents diseases and improves quality of life.
- Good oral hygiene practices like brushing, flossing, and rinsing are essential to avoid dental problems.
- Food safety measures ensure the prevention of food-borne illnesses.
- Adherence to hygiene practices contributes to better physical and social well-being.
- The mission of an effective food safety system is to protect and improve public health.
- Recce of camp site should be carried out diligently to meet the hygiene and sanitation requirements of the camp.
- Various appointments of the camp must ensure the measures to be undertaken to ensure proper camp sanitation and implemented in time.
- Living area, water point, and cookhouse form major aspects to be focused while ensuring maintaining good camp hygiene.
- Good personal and camp hygiene are morale boosters for cadets.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the primary purpose of personal hygiene?

- (a) To look attractive
- (b) To prevent diseases and infections
- (c) To follow societal norms
- (d) To reduce the need for medical check-ups

Q2. Which of the following is NOT a key aspect of oral hygiene?

- (a) Brushing twice daily
- (b) Flossing regularly
- (c) Using a tongue scraper
- (d) Drinking sugary beverages frequently

Q3. Which of these diseases is caused by poor sanitation?

- (a) Diabetes
- (b) Tuberculosis
- (c) Typhoid
- (d) Hypertension

Q4. Which of the following practices prevents foodborne diseases?

- (a) Eating expired food
- (b) Washing hands before handling food
- (c) Cooking food at a low temperature
- (d) Mixing raw and cooked food

Q5. Which organization defines hygiene as "conditions and practices that help maintain health and prevent the spread of diseases"?

- (a) UNICEF
- (b) WHO
- (c) FDA
- (d) FAO

Q6. What is the first step in maintaining proper hand hygiene?

- (a) Drying hands with a towel
- (b) Using hand sanitizer
- (c) Washing hands with soap and water
- (d) Rinsing hands with plain water

Q7. Which of the following is a direct benefit of oral hygiene?

- (a) Reducing body odour



- (b) Preventing tooth decay and gum disease
- (c) Preventing acne
- (d) Improving digestion

Q8. What is a major cause of foodborne diseases?

- (a) Proper food storage
- (b) Washing hands before eating
- (c) Cross-contamination of food
- (d) Cooking food thoroughly

Q9. Which of the following is NOT a proper waste disposal practice in camp sanitation?

- (a) Using covered bins for waste
- (b) Burning plastic waste in open areas
- (c) Proper sewage treatment
- (d) Disposing of food waste systematically

Q10. What is the purpose of conducting a recce for selecting a camp site?

- (a) To ensure accessibility, sanitation, and safety
- (b) To provide a place for entertainment
- (c) To avoid interactions with locals
- (d) To establish trade with nearby areas

Q11. What is the recommended depth of soakage pits in a camp?

- (a) 5 feet
- (b) 6 feet
- (c) 7 feet
- (d) 4 feet

Q12. What is a critical practice to ensure good camp hygiene?

- (a) Cooking food only once a day
- (b) Not cleaning the cookhouse regularly
- (c) Keeping living spaces dry and ventilated
- (d) Ignoring proper waste disposal

Q13. What should be done after using the toilet to maintain hygiene?

- (a) Spray perfume
- (b) Wash hands with soap and water
- (c) Avoid drinking water
- (d) Use a cloth to wipe hands

Q14. Which of the following best describes sanitation?

- (a) A set of habits for personal grooming
- (b) Ensuring safe disposal of waste and clean surroundings
- (c) Only washing hands regularly



(d) Brushing teeth twice a day

Q15. What are symptoms of Norovirus Infection?

(a) Diarrhoea

(b) Vomiting

(c) Stomach cramps

(d) All of above

Short Answer Questions

Q1. What are three key aspects of personal hygiene, and why are they important?

Q2. List three consequences of poor oral hygiene and explain their impact on health.

Q3. Explain the role of handwashing in preventing disease transmission.

Q4. Why is camp sanitation crucial in NCC training camps?

Q5. What are two major causes of food contamination, and how can they be prevented?

Long Answer Questions

Q1. Discuss the importance of maintaining hygiene and sanitation in daily life. How does it contribute to individual and community well-being?

Q2. Describe the essential practices for maintaining oral hygiene. Why is regular dental care important?

Q3. Explain the importance of food safety and hygiene in preventing foodborne illnesses.

Q4. What are the key factors to consider while selecting a camp site to ensure proper hygiene and sanitation?

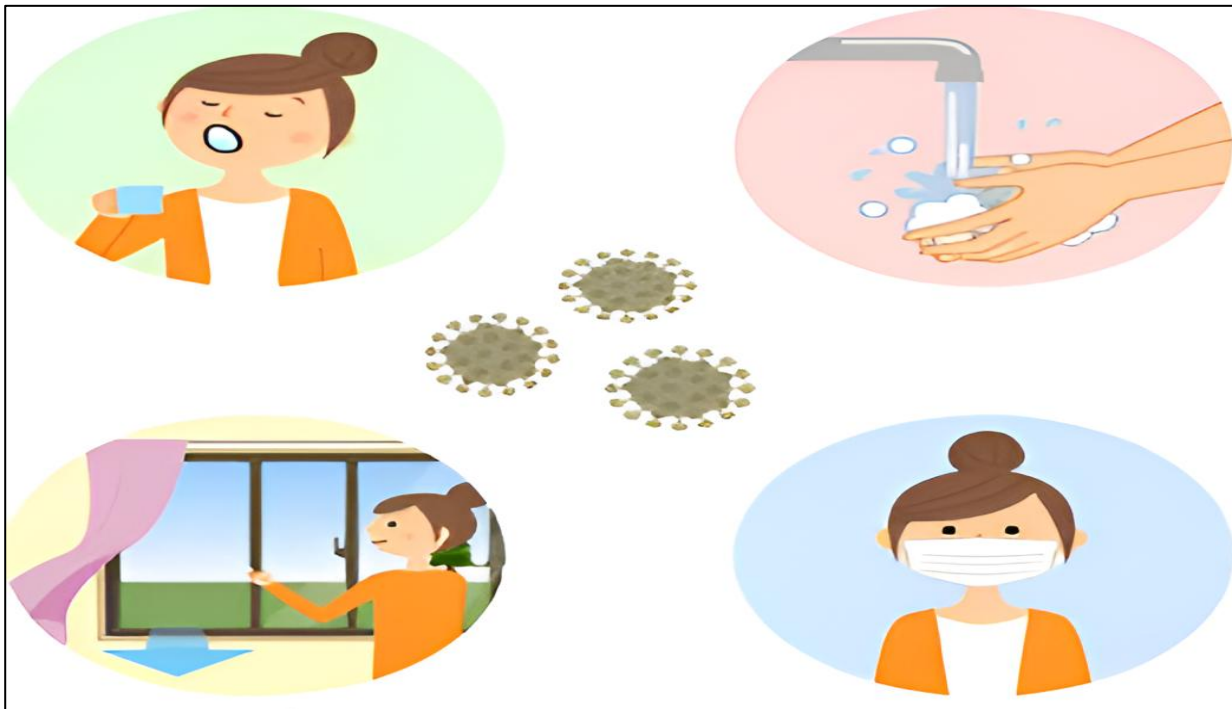
Q5. Describe the dos and don'ts of maintaining hygiene and sanitation in an NCC camp. How do these practices contribute to cadet health and discipline?

PHYSICAL AND MENTAL WELLNESS (JD/JW)

CHAPTER PMW III: INFECTIOUS DISEASES AND PREVENTION

"The greatest medicine of all is teaching people how not to need it."

Hippocrates



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 2nd Year (JD/JW)
Conducting Officer : Associate NCC Officer (ANO)
Training Aids : Script/Lesson Plan: Computer with OHP, Screen, Pointer
Staff, Presentation

Time Plan

- Introduction : 02 Mins
- Part I : 15 Mins
- Part II : 12 Mins
- Part III : 08 Mins
- Conclusion : 03 Mins





INTRODUCTION

1. A disease is an unusual condition that affects part or all of the body. Infectious diseases are caused by tiny organisms like bacteria, viruses, fungi, and parasites. These diseases can spread directly between people or through things like contaminated food, water, air, and insects. In the past, infectious diseases have caused many problems for people, but better medicine, cleanliness, and vaccines have helped prevent and control them. It is important to know how these diseases spread and how to stop them. Good hygiene, quarantine, vaccines, and quick medical care can help reduce the spread. Vaccines, in particular, have helped eliminate dangerous diseases like smallpox and polio. This chapter will talk about infectious diseases, how they spread, ways to prevent them, and how vaccines help protect our health.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I: Infectious Diseases
- (b) Part II: Prevention of Infectious Diseases
- (c) Part III: Important Vaccinations

INTERESTING FACTS

- Over 200 different viruses can cause the common cold.
- Mosquitoes are responsible for more human deaths annually than any other insect, due to malaria and other vector-borne diseases.
- Vaccines have eradicated smallpox, a disease that killed millions in history.

LEARNING OBJECTIVES

- Learn about various infectious diseases and identify the pathogens that cause them.
- Study the modes of transmission for infectious diseases.
- Understand the importance of hygiene practices in preventing infectious diseases.
- Learning about quarantine and isolation in controlling outbreaks.
- Understand the mechanism of vaccines and list essential vaccines for common diseases.

2. **Infectious means spreading or causing infection.** “Infection” is having a disease, and “to infect” means contaminating with germs. Infectious diseases spread germs.





3. **Infectious Diseases.** Pathogenic microbial agents, such as viruses, bacteria, or other microorganisms, cause infectious diseases. Pathogenic means “disease- producing.” Microbial refers to microbes—or microorganisms—that can produce disease. Viruses are sometimes referred to as microbes because they are microscopic and can cause disease. An infectious disease occurs when harmful germs enter the body, spread, and disrupt normal bodily functions.

4. Examples of infectious diseases include chickenpox, cholera, common cold, COVID-19, Ebola, flu, hantavirus, hepatitis A & B, HIV/AIDS, Lyme disease, malaria, measles, meningitis, polio, pneumonia, smallpox, STDs (sexually transmitted diseases), tuberculosis, West Nile virus, and Zika.

5. Some diseases are common, like colds and flu, while others are rare or largely eliminated.

6. **Pathogens.** Pathogens are **microorganisms, such as bacteria, viruses, fungi, or parasites, that can cause disease in their host organisms.** They have the ability to infect and multiply within the host, leading to illness or harm. The types of pathogens and their roles are as follows:-

- (a) **Bacteria.** Cause illnesses like tuberculosis.
- (b) **Viruses.** Lead to diseases such as influenza and HIV/AIDS.
- (c) **Fungi.** Cause infections like athlete’s foot.
- (d) **Parasites.** Responsible for diseases such as malaria.

7. **Contagious Disease.** An infectious disease is contagious if it spreads through direct contact with an infected person, their discharges, or contaminated objects or surfaces:-

- (a) **Malaria.** It is an infectious disease caused by a parasite. However, **it is not considered contagious** because it cannot be contracted merely by being near or coming into contact with an infected individual. The primary mode of transmission is through the bite of a mosquito, which introduces the parasite into the bloodstream.
- (b) **COVID-19.** It is a disease caused by a new type of coronavirus. It spreads easily through contact, droplets, and infected surfaces, making it highly **contagious.**

8. **Causes of Infectious Diseases.** Infectious diseases are caused by pathogens like viruses, bacteria, fungi, and parasites entering the body. They spread through person-to-person contact, contaminated food or water, and bug bites. Symptoms arise from the pathogens damaging cells and the immune system’s response. While some infections are minor, others can be serious.

9. **Modes of Transmission of Infectious Diseases.** Infectious diseases spread in various ways, sometimes through multiple methods. Major ways include:-



- (a) **Direct Contact**. Touching, sexual contact, or contact with infected bodily fluids.
- (b) **Airborne Spread**. Inhaling droplets containing pathogens (e.g., COVID-19, tuberculosis).
- (c) **Vector-Borne Transmission**. Spread via insects like mosquitoes (e.g., malaria).
- (d) **Contaminated Food/Water**. Ingesting contaminated substances (e.g., cholera, hepatitis A).

Overview of Common Infectious Diseases

10. Infectious diseases are widespread globally, though some occur more frequently than others. These infections occur when an organism enters body cells, releases toxins, and triggers reactions in host tissues. Anyone can contract an infectious disease. Factors such as a weakened immune system or travel to regions with certain highly transmissible diseases may increase the risk. Individuals at higher risk of infectious disease include:-

- (a) Individuals with weakened immune systems, such as those undergoing cancer treatment, living with HIV, or on certain medicines.
- (b) Young children, pregnant women, and senior citizens.
- (c) Unvaccinated individuals against common infectious diseases.
- (d) Medical professionals.
- (e) People travelling to areas with mosquitoes that carry malaria, dengue, or Zika virus.

11. **Common Infectious Diseases**. Understanding the symptoms, complications, and global impact of common infectious diseases can aid in their identification and the timely implementation of precautions to prevent or reduce the spread of these diseases: -

Influenza

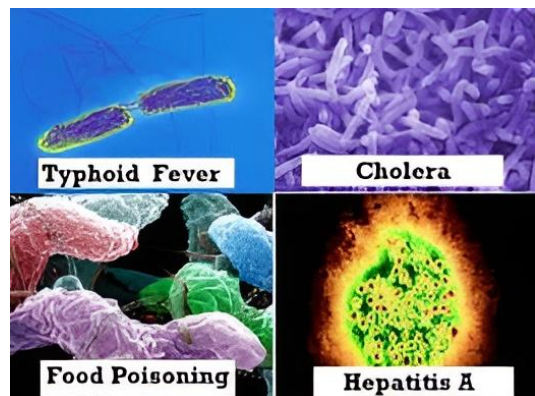
- **Symptoms**. Fever, chills, sore throat, and body aches.
- **Complications**. Pneumonia and worsening of chronic conditions.
- **Global Impact**. Seasonal outbreaks causing significant morbidity.



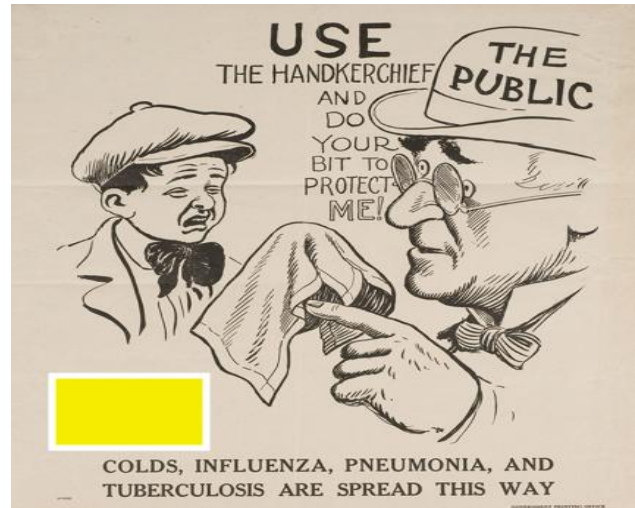
Tuberculosis	<ul style="list-style-type: none">➤ Symptoms. Persistent cough, weight loss, night sweats.➤ Complications. Lung damage.➤ Global Impact. A leading cause of death worldwide.
HIV/Aids	<ul style="list-style-type: none">➤ Symptoms. Weak immune system, frequent infections.➤ Complications. Opportunistic infections, cancer.➤ Global Impact. A pandemic affecting millions.
Malaria	<ul style="list-style-type: none">➤ Symptoms. Fever, chills, headache.➤ Complications. Severe anaemia, cerebral malaria.➤ Global Impact. Endemic in tropical regions.
Covid-19	<ul style="list-style-type: none">➤ Symptoms. Fever, cough, loss of taste/smell.➤ Complications. Pneumonia, long COVID.➤ Global Impact. Worldwide pandemic with economic and social effects.
Hepatitis (A, B, C)	<ul style="list-style-type: none">➤ Symptoms. Jaundice, fatigue, abdominal pain.➤ Complications. Liver damage, cirrhosis.➤ Global Impact. Millions affected annually.

12. Contagious diseases (communicable diseases) are classified as follows:-

(a) **Excremental Diseases.** Diseases spread through human excreta (urine and faeces) can contaminate food, water, or hands of cooks, leading to infections like typhus fever, dysentery, diarrhoea, jaundice, and intestinal worms.



(b) **Droplet Infection.** These diseases are transmitted through pathogens expelled from the nose, throat, or lungs into the air in small droplets of saliva during coughing, sneezing, or even speaking. Common illnesses within this category include the common cold, influenza, diphtheria, meningitis (inflammation of the brain), and tuberculosis.



DID YOU KNOW?

- The first vaccine was developed by Edward Jenner in 1796 for smallpox.
- HIV/AIDS affects over 38 million people globally.
- Quarantine as a public health measure dates back to the 14th century, imposed to control the 'Black Death' Plague.

(c) **Contact Diseases.** These diseases spread through direct contact with an infected person. Examples include venereal diseases like syphilis, gonorrhoea, and skin infections.



(d) **Insect Borne Diseases.**

These diseases spread when germs are transferred from a sick person to a healthy person by blood-sucking insects, known as ‘carriers.’ These insects bite an infected person and then a healthy one, transmitting the germs. These germs multiply in the new host’s blood during incubation, leading to symptoms.

- **Mosquito.** Malaria, Dengue, and Filariasis.
- **Sand fly.** Sand-fly fever, Kala Azar, Oriental Sore.
- **Lice.** Typhus, Relapsing Fever.
- **Flies.** Diarrhoea, Dysentery, Cholera, Typhoid.
- **Fleas.** Plague, Typhus.
- **Ticks.** Relapsing Fever, Typhus.

(e) **Waterborne Diseases.**

Diseases such as cholera, dysentery, diarrhoea, and jaundice spread through water. Contamination occurs through vomit or faeces entering the water. To prevent epidemics, it is essential to disinfect water and properly dispose of waste. Eliminating all disease sources is crucial.

(f) **Animal-Borne Diseases.**

Animals may transmit pathogens through the consumption of milk or via insect vectors. Some common zoonotic diseases include rabies, plague, anthrax, and tuberculosis.

PART II : PREVENTION OF INFECTIOUS DISEASES

13. **Hygiene Practices to Prevent Infectious Diseases.**

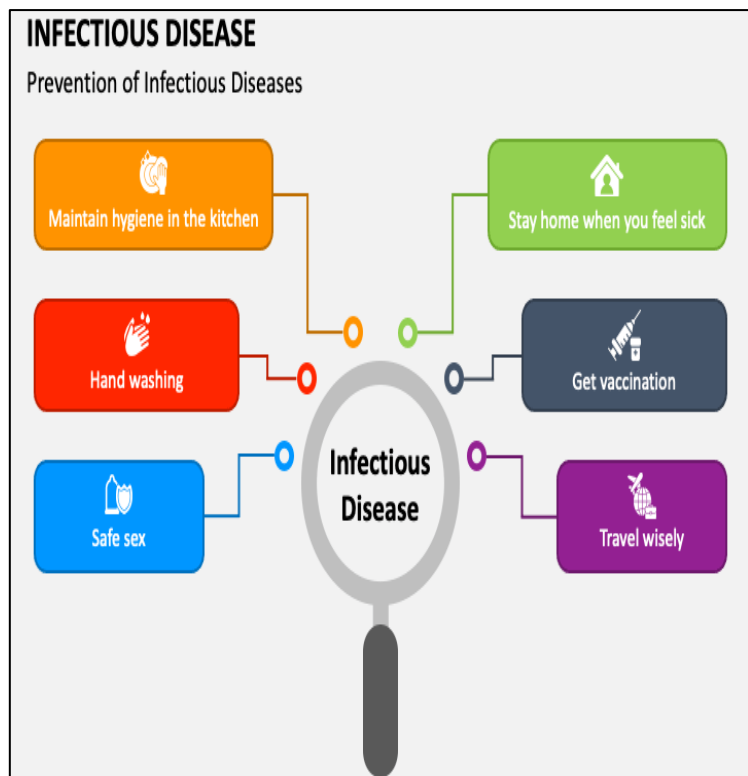
(a) Wash your hands with soap and water. It is particularly important to ensure meticulous handwashing before meal preparation or eating, using the restroom, and following gardening or contact with soil. Peel or thoroughly wash all fruits and vegetables.

(b) Clean food preparation surfaces and utensils thoroughly with soap and water after each use.

(c) Freeze meats at -18°C until thawing, then cook to a safe temperature before eating.

(d) Avoid consuming raw or partially cooked seafood.

(e) Avoid drinking untreated water.





- (f) Consumption of unpasteurised milk is not recommended.
- (g) Ensure to cover your nose and mouth when sneezing or coughing.
- (h) Disinfect surfaces that are frequently touched in both your home and workplace.
- (j) Do not touch or share personal items with infected persons.
- (k) Avoid others while sick with an infectious disease. When sick, use a mask.
- (l) Refrain from drinking or swimming in water that may be contaminated.
- (m) Use tick and mosquito repellent, wear protective clothing, and check for ticks after being in wooded or grassy areas.
- (n) Dispose of waste properly.
- (o) Maintain a clean environment.

14. **Quarantine and Isolation.**

- (a) **Quarantine.** Limits movement of those exposed to a contagious disease but not yet symptomatic.
- (b) **Isolation.** Isolates individuals with infections to prevent disease transmission.
- (c) **Significance.** Interrupts the transmission chain during outbreaks.

Prevention of Contagious Diseases

15. **Prevention of Excremental and Water-Borne Diseases.** Measures to prevent to prevent excremental and water-borne diseases include:

- (a) Control of water routes can be effectively managed by disinfecting the water supply or providing an alternative source of safe water.
- (b) The control of the milk distribution process can be effectively managed by subjecting the milk to boiling or pasteurisation.
- (c) Foodborne infection can be managed through food hygiene standards and by preventing sick individuals from handling food.
- (d) Proper excreta disposal prevents disease transmission through faecal matter.

16. **Prevention of Droplet Infections.** This can be accomplished through the use of masks, adequate spacing of beds, screening, dust control, preventing overcrowding, proper ventilation, refraining from spitting in public areas, ensuring sufficient sunlight exposure, and appropriate air disinfection.



17. **Prevention of Contact Diseases.** Detailed measures to prevent contact diseases include:-

- (a) Implement comprehensive patient segregation.
- (b) No direct contact between the patient and relatives or staff.
- (c) Early diagnosis prevents patient spread.
- (d) Proper disposal of all excreta and disinfection of all patient articles.

18. **Prevention of Insect-Borne Diseases.** Measures to prevent insect-borne diseases:-

- (a) Filling, levelling, and drainage breeding places, along with proper water management, can eliminate larvae. Effective sewage and wastewater disposal are crucial for preventing breeding and spread of Culex mosquito.
- (b) Utilise kerosene oil, fuel oil, or specialised oil to prevent larvae.
- (c) Application of residual sprays such as malathion.
- (d) Use mosquito nets, screen doors and windows, apply repellent, and wear long sleeves after sundown.
- (e) Control rodents, fleas and mosquitos in and around the house.
- (f) Refrain from contact with any wild rodents, particularly those that appear sick or are deceased.
- (g) Avoid contact with sick or dead animals or their waste.

Preventive Measures to Inhibit the Spread of Contagious Diseases

19. **Segregation of the Patient.** The following preventive measures are necessary to control the spread of contagious diseases:-

- (a) Preferably shift the patient to an isolated room.
- (b) Ensure the room conforms to hygiene and sanitation standards, i.e., adequate ventilation, sunlight, and cleanliness.
- (c) Nominate one healthy person to undertake nursing and care of the patient.
- (d) Nominated person to take preventive measures like the use of masks, gowns, and gloves and avoid direct contact and hand washing before and after every visit.
- (e) Clothing and utensils used by the patient to be cleaned/washed separately.
- (f) Safe disposal of patients' excreta – Urine, Stool, Sputum, Refuse, e.g., discarded dressings, garbage etc. by burning.



- (g) Disinfect frequently touched surfaces like doorknobs, light switches, and furniture with appropriate disinfectants.
- (h) Limit visitors to only essential caregivers to minimize the risk of infection spread.
- (j) Monitor the patient's symptoms regularly and seek medical attention if their condition worsens.

20. **Destroy Agents (Germs) Causing Infection in Surrounding Areas or Premises.**

Immediately upon detecting a communicable disease, take the following actions to destroy the source of agents/germs causing infection:-

- (a) Removal or destruction of garbage.
- (b) Cleaning the drains & keeping them covered.
- (c) Remove/dry out wastewater.
- (d) Spray Malathion mixed in water (1 mL of Malathion and 1000 mL of water) in and around the premises. (Caution - Malathion is highly poisonous. Direct breathing/touching should be avoided.) Wash hands after use.
- (e) Keep premises free of rodents (rats) and stray dogs.
- (f) Use mosquito nets, long sleeves, and screening of doors and windows.

Disinfection Means

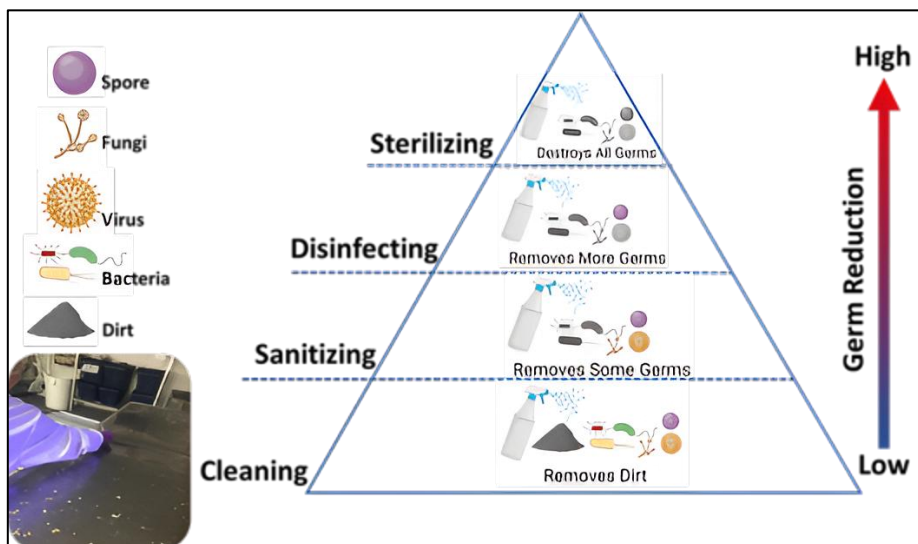
21. **Natural Means.** Sunlight and air can be used to disinfect articles like blankets, mattresses, pillows, and also the rooms. Microorganisms thrive in darkness and need moisture for their survival; on being exposed to sunlight and air, they die.

22. **Physical Means.** Ways to physically destroy germs are as under:-

- (a) **Heat.** Heat can be used in two ways for sterilising. Moist Heat in the form of boiling kills germs very rapidly. Dry heat sterilization, using methods like flaming or hot air ovens, involves exposing materials to high temperatures without moisture to kill microorganisms. 'Autoclaving' or Steam-under-Pressure is the most effective method used to sterilise all hospital equipment, which can be boiled, like linen, bandage, dressing material, gloves etc.
- (b) **Cold.** Freezing or freeze-drying can inactivate bacteria. Some of them can, however, survive even at 0° C.
- (c) **Radiation.** It includes ionising radiations like X-rays, gamma, beta, and ultraviolet radiation. These are expensive methods and are not suitable for small-scale procedures.

(d) **Chemical Agents.** Agents like phenol, Savlon, potassium permanganate, hydrogen peroxide, etc. are commonly used for disinfection and sterilisation. The strength of the agent depends upon the concentration being used.

(e) **Other Methods.** Disinfection and sterilisation can also be done by using other methods like infrared rays, filtration, etc.



PART III : IMPORTANT VACCINATIONS

Vaccines

23. A vaccine is any substance used to stimulate the production of antibodies, which can provide immunity against one or several diseases.

24. **Mechanism.** A harmless form of a pathogen is introduced to stimulate the immune system to produce antibodies.



25. **Examples of Essential Vaccines.**

- (a) MMR (Measles, Mumps, Rubella)
- (b) DPT (Diphtheria, Pertussis, Tetanus)
- (c) Polio (IPV/OPV)
- (d) HPV (Human Papillomavirus)



26. **Inoculation and Vaccinations.** Free inoculations and vaccinations are provided under government programs at Primary Health Centres or Hospitals. If unavailable, they should be obtained from the market. Key inoculations and vaccinations include:-

<u>Name of Vaccine</u>	<u>Disease Prevented</u>
Injection Rabipur	Rabies
Injection Tab	Typhoid
Injection Hepatitis 'B'	Hepatitis 'B'
Injection T T	Tetanus
Oral Polio	Polio
MMR	Measles, Mumps, Rubella
DPT	Diphtheria, Pertussis, Tetanus
HPV	Human Papillomavirus

HIGHER ORDER THINKING SKILLS (HOTS)

- Why are hygiene practices considered the first line of defence against infectious diseases?
- How does the transmission mode of a disease affect its prevention measures?
- In what ways do vaccines contribute to controlling global outbreaks of infectious diseases?



CONCLUSION

27. Infectious diseases pose a major global health challenge, necessitating prevention, treatment, and management. Thus, studying these diseases is both a biological and social effort.

28. Since the beginning of the 21st century, diseases have posed complex challenges for human beings. Effective control of communicable diseases necessitates identifying the causative organism and taking measures to prevent its transmission. It is essential to treat the infected individuals and protect others from exposure to the pathogen. Additionally, legal regulations mandate the reporting of numerous communicable diseases.

SUMMARY

- Infectious diseases stem from bacteria, viruses, fungi, and parasites.
- They spread via contact, airborne particles, vectors, and contaminated food or water.
- Diseases like influenza, tuberculosis, HIV/AIDS, malaria, and hepatitis heavily impact global health.
- Hygiene, quarantine, isolation, and vaccines are essential for disease prevention and control.
- Vaccines against measles, polio, and HPV ensure lower morbidity/mortality rates



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the study of diseases called?

- | | |
|----------------|------------------|
| (a) Immunology | (b) Pathology |
| (c) Virology | (d) Bacteriology |

Q2. Which of the following is NOT a type of pathogen?

- | | |
|--------------|-------------|
| (a) Bacteria | (b) Viruses |
| (c) Minerals | (d) Fungi |

Q3. How are infectious diseases primarily transmitted?

- | | |
|--------------------------------|----------------------|
| (a) Direct contact | (b) Airborne spread |
| (c) Contaminated food or water | (d) All of the above |

Q4. Which of the following diseases is caused by a virus?

- | | |
|------------------|--------------------|
| (a) Tuberculosis | (b) Malaria |
| (c) Influenza | (d) Athlete's foot |

Q5. What is the primary mode of transmission for malaria?

- | | |
|--------------------|------------------------|
| (a) Airborne | (b) Direct contact |
| (c) Mosquito bites | (d) Contaminated Water |

Q6. Which of the following diseases has been eradicated due to vaccinations?

- | | |
|------------------|--------------|
| (a) HIV/AIDS | (b) Smallpox |
| (c) Tuberculosis | (d) Malaria |

Q7. What is an excremental disease?

- (a) A disease spread by air droplets
- (b) A disease spread by contaminated food, water, or human waste
- (c) A disease spread through insect bites
- (d) A disease that spreads via direct skin contact

Q8. Which of the following is NOT a preventive measure for infectious diseases?

- (a) Frequent handwashing
- (b) Consuming unpasteurized milk
- (c) Using mosquito repellents
- (d) Getting vaccinated



Q9. How does quarantine help control infectious diseases?

- (a) It isolates infected individuals
- (b) It limits movement of those exposed to a disease
- (c) It provides medical treatment
- (d) It strengthens the immune system

Q10. Which of the following vaccines prevents cervical cancer?

- (a) DPT
- (b) MMR
- (c) HPV
- (d) Polio

Q11. Which of the following is an example of a waterborne disease?

- (a) Tuberculosis
- (b) Cholera
- (c) Influenza
- (d) Syphilis

Q12. What is the main function of a vaccine?

- (a) To cure a disease
- (b) To kill all bacteria in the body
- (c) To stimulate the immune system to produce antibodies
- (d) To act as a pain reliever

Q13. What type of pathogen causes athlete's foot?

- (a) Bacteria
- (b) Virus
- (c) Fungi
- (d) Parasite

Q14. Which measure is effective in preventing droplet infections?

- (a) Wearing masks
- (b) Washing fruits and vegetables
- (b) Using mosquito nets
- (d) Avoiding dairy products

Q15. Which of the following statements is TRUE?

- (a) All infectious diseases are contagious
- (b) Vaccinations can help prevent certain infectious diseases
- (c) Insect-borne diseases are transmitted through direct contact
- (d) Quarantine is only needed for bacterial infections

Short Answer Questions

- Q1. What are the four main types of pathogens that cause infectious diseases?
- Q2. How is malaria transmitted?
- Q3. What is the difference between quarantine and isolation?



- Q4. Name three hygiene practices that help prevent infectious diseases.
- Q5. What is an example of an excremental disease, and how does it spread?

Long Answer Questions

- Q1. Describe the different modes of transmission for infectious diseases with examples.
- Q2. What are the key preventive measures for insect-borne diseases?
- Q3. Explain the role of vaccinations in preventing infectious diseases. Provide examples.
- Q4. Discuss the significance of hygiene in controlling the spread of infectious diseases.
- Q5. What are contagious diseases, and how do they differ from non-contagious infectious diseases? Provide examples.

PHYSICAL AND MENTAL WELLNESS (JD/JW)

CHAPTER PMW IV : ESSENTIAL FIRST AID AND LIFE-THREATENING EMERGENCIES

"First aid is not just about knowing what to do, but about doing what you know when every second counts."



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 1st Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/Lesson Plan; Presentation on Computer/ Chart, Mannequins.

Time Plan

- Introduction : 02 Mins
- Part I : 08 Mins
- Part II : 15 Mins
- Part III : 05 Mins
- Part IV : 07 Mins
- Conclusion : 03 Mins





INTRODUCTION

1. First Aid is the immediate care given to a person who has been injured or suddenly taken ill. It is a vital skill that can help save lives, prevent further harm, and promote recovery. As NCC cadets, it is essential to learn the basics of First Aid.
2. In Camps accidents may happen and it is crucial to know how to respond. Through this training, you will learn the fundamental principles of First Aid including wound care, bleeding control, and basic life support.
3. It will be good to remember that while First Aid is not a substitute for medical treatment, but it can save lives in emergency situations. It can also prevent infections and reduce pain and discomfort.



LEARNING OBJECTIVES

- Understand the importance of First Aid in daily life.
- Identify common injuries and emergencies.
- Learn basic First Aid principles and how to provide immediate care.
- Be able to perform CPR and assist choking victims.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : First Aid
- (b) Part II : Life-threatening Emergencies & CPR
- (c) Part III : Importance of First Aid Knowledge
- (d) Part IV : Practice on CPR

INTERESTING FACTS

- The earliest recorded evidence of First Aid practices comes from ancient Egypt, Greece, and Rome, where soldiers and caregivers used various techniques to treat wounds and injuries.
- The first First Aid manual was written in 1870 by Dr. Peter Shepherd, a British physician. It outlined basic First Aid techniques for treating common injuries.

PART I : FIRST AID

4. **First Aid.** First Aid is the **immediate care** provided to an injured or ill person before professional medical help arrives. Its objectives are to **preserve life, prevent further harm, and promote recovery.** NCC cadets should have basic First Aid knowledge to handle common injuries and emergencies.



5. Knowledge of First Aid provides NCC cadets with essential skills to handle injuries and emergencies, contributing to a safer environment during training and in daily life. By learning basic principles, cadets can offer immediate care and reduce complications until professional help is available.



6. Principles of First Aid.

- (a) Assess the situation for safety.
- (b) Call for help if necessary.
- (c) Provide immediate care while ensuring personal safety.
- (d) Stop bleeding, manage shock, and prevent infection.
- (e) Keep the injured person comfortable until medical help arrives.

7. Additional Principles of First Aid.

- (a) Keep the area clean and safe.
- (b) Know how to use First Aid equipment correctly.
- (c) Stay calm to provide effective First Aid.



8. **Activation of Emergency Medical Services.**

- (a) Call emergency services if needed.
- (b) Share details of injury or illness with medical staff.

9. **Points to be kept in mind before administering First Aid.** In the event of an emergency or when First Aid is required, the following should be verified before administering First Aid:-

- (a) **History.** Ask casualties and witnesses: How did it happen?
- (b) **Symptoms.** What does the casualty experience? (e.g., pain, immobility, or numbness)
- (c) **Signs.** Observe level of consciousness, bleeding, weak pulse, limb deformities, and skin colour changes. Check for Medic-Alert bracelets or health cards.
- (d) Ensure that approaching any incident or casualty does not put you at risk.
- (e) Never touch someone in contact with electricity to avoid electrocution.
- (f) Do not allow anyone to smoke near a crashed car; as there could be petrol, oil, or chemicals on the road.

10. **Priorities and Principles.** In incidents involving multiple casualties, prioritise treatment for the most severely injured individuals. Be aware that the noisiest casualty may not necessarily be the most seriously injured. Establish ABC (Airway, Breathing, Circulation) within three minutes if the casualty is unconscious to prevent permanent injury to the brain and other vital organs. Administer necessary care if shock is present.

11. **Steps of First Aid.** In an accident or incident, follow these to administer First Aid to the injured person:-

- (a) Approach the casualty safely and easily.
- (b) Assess the scene.
- (c) Check if the person is conscious, semiconscious, or unconscious.
- (d) Provide prompt and suitable treatment based on priority.
- (e) Quickly arrange to move the casualty.
- (f) First aid should be continued, once started.
- (g) Minimise handling of the casualty.
- (h) Comfort the casualty.



- (j) Act swiftly and calmly.
- (k) Facilitate the secure extraction of casualties.

PART II : LIFE-THREATENING EMERGENCIES & CPR

General Care of Injured Persons

12. **Principles of First Aid for Injuries.** Despite the wide variety of possible injuries, several principles of first aid generally apply to all emergencies:-

- (a) Remain calm and avoid rushing.
- (b) Unless the victim's location places them at risk of additional harm, the victim should remain unmoved until the extent of their injury has been assessed.
- (c) Check the victim for wounds, burns, and fractures.
- (d) Reassure the conscious victim.
- (e) The victim's head should be kept at body level unless the person complains of difficulties in breathing.
- (f) In the absence of a skull or spine injury, the victim's head and shoulders may be raised slightly to make the person more comfortable.
- (g) If vomiting occurs, the head may be turned to one side.
- (h) Do not give liquids to an unconscious person.
- (j) Immediate relief is crucial for asphyxia, severe bleeding, and poisoning to prevent loss of life.
- (k) The victim should be safeguarded against shock.

13. **Asphyxia.** Respiration supplies oxygen to the body's tissues and organs, essential for their function. It includes inspiration (air intake and lung expansion), expiration (air release and lung contraction), and a pause. The respiratory system comprises the respiratory tract & lungs, with muscle actions controlled by the brain's respiratory centre.

14. **Causes.** Asphyxia is a condition characterised by irregular breathing caused by any interference with respiration. The main causes of asphyxia are:-

- (a) **Drowning.** Caused by water entering the air passage.
- (b) **Hanging and Strangulation.** Cause air obstruction.
- (c) Excessive intake of drugs such as sleeping pills, morphine, and pethidine.
- (d) Electric Shock.



(e) Medical conditions, such as tetanus, epilepsy, and rabies.

(f) **Suffocation.**

(i) Obstruction of air entry through the air passage.

(ii) Foreign body in airway.

(iii) Inhalation of poisonous gases, e.g., carbon monoxide.

15. **Signs and Symptoms of Asphyxia.**

(a) Dizziness and weakness.

(b) Shortness of breath or rapid breathing.

(c) Rapid pulse.

(d) Partial loss of consciousness.

(e) Neck veins swell.

(f) Blue discolouration of face, lips, nails, fingers, and toes.

16. **General Rules for Treatment of Asphyxia.**

(a) Remove the cause or the casualty from the danger.

(b) Ensure there is a clear airway.

(c) Lay the person on their back. Press the head backward while supporting the neck with your palm. Ensure the tongue is clear of the airway. Administer mouth-to-mouth breathing.

First Aid in Special Cases

17. **First Aid for Drowning Cases.**

(a) Remove the person from water safely.

(b) Loosen wet clothes.

(c) Clear mouth, throat, and nostrils of mucus and foreign objects.

(d) Patient should be made to lie down over his belly, face down, head turned to one side, arms stretched beyond the head, tongue pulled out.

(e) Check for breathing and pulse.

(f) If not breathing, begin CPR immediately. Continue artificial respiration until the patient starts breathing.

(g) Keep the person warm and seek medical help.

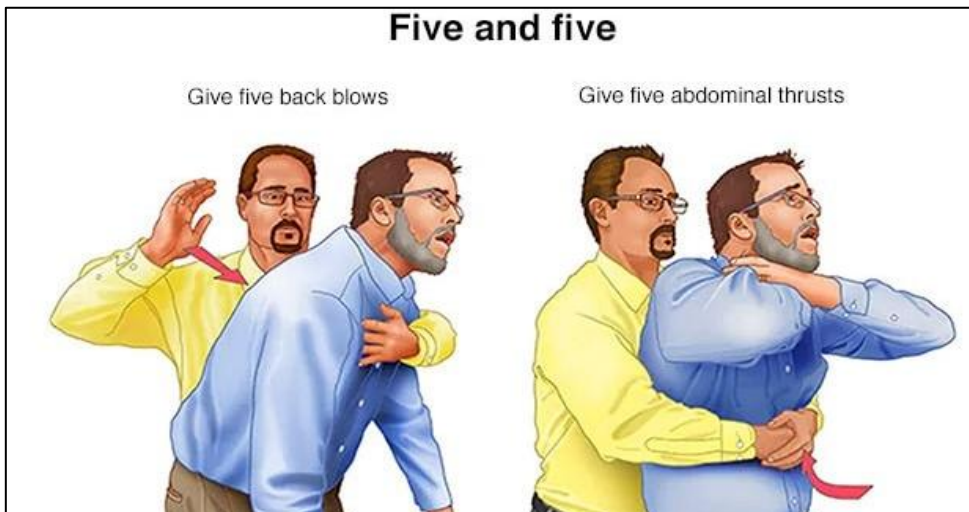
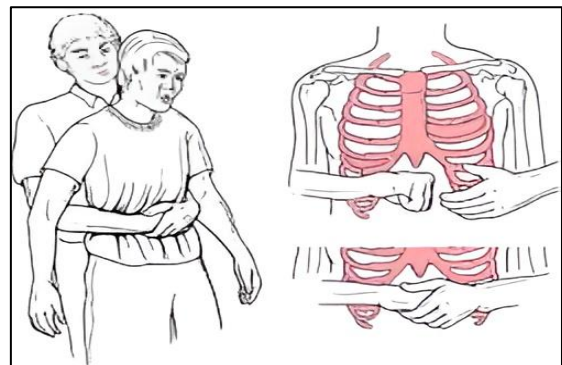


18. **First Aid in Case of Strangulation.**

- (a) Cut the constriction.
- (b) Clear the air passage.
- (c) Start artificial respiration.
- (d) Administer inhalations if possible.
- (e) Keep the patient warm and comfortable.

19. **First Aid in Case of Choking (Heimlich Manoeuvre)**

- (a) Bend the casualty's head and shoulders forward to dislodge the obstructions.
- (b) In the case of a small child, hold the child upside down and thump the child's back hard between the shoulder blades or encourage vomiting by passing two fingers to the back of the throat.
- (c) Encourage the victim to cough forcefully if they can.
- (d) If choking continues, give five back blows followed by five abdominal thrusts.
- (e) If unconscious, begin CPR immediately.



20. **First Aid in Case of Suffocation by Poisonous Gas.** Ensure your own safety and Dial emergency services informing them of the situation. Promptly move the affected individual to an area of fresh air, away from the gas. Position the victim comfortably, preferably on their left side, and monitor their breathing. Administer CPR if required.

21. **First Aid in Case of Electric Shock.**

(a) **Turn off the power source** before touching the person.

(b) Remove the person from contact with the current, if possible. Stand on insulating material, such as rubber-soled shoes or boots, or piles of newspapers. Use a stick or a rod of insulating material.

(c) Check for breathing and pulse.

(d) Start CPR if necessary.

(e) Provide treatment for shock and burns.

(f) Seek medical attention immediately.



22. **Insensibility or Unconsciousness.** Insensibility or unconsciousness happens when the brain's activity is disrupted, affecting the central nervous system's functions.

23. **Stages of Unconsciousness.**

(a) **1st Stage(Delirium).** Restlessness of body and mind is present.

(b) **2nd Stage.** The patient responds to loud commands and provides the maximum response to minimum stimuli.

(c) **3rd Stage(Semi-Coma).** Patient responds only to painful stimuli (minimal response to maximum stimulus).

(d) **4th Stage.** This stage is characterised by the patient's lack of response to any stimuli.

24. **Causes of Unconsciousness or Coma.**

(a) Head injury and brain haemorrhage.

(b) Hypoglycaemia.

(c) Heart failure.

(d) Physical agents such as heat strokes and electric shocks.

(e) Epilepsy.



25. **General Rules of First Aid in Casualties of Unconsciousness.**

- a) Make the patient lie down with their head turned to one side. Pull out their tongue.
- b) Loosen the clothing and provide fresh air.
- c) If breathing is stopped or is irregular, start artificial respiration.
- d) Keep the air passage clear.
- e) Do not administer anything orally. Remove false teeth, if present.

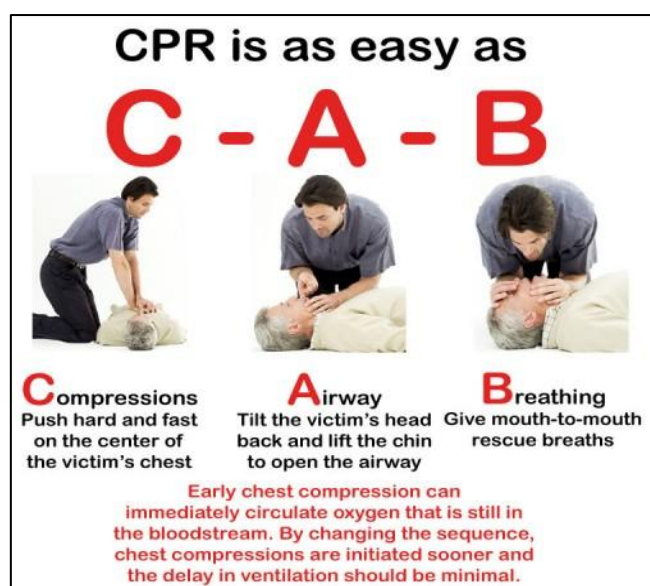
26. **Artificial Respiration.** If breathing is irregular or there is cardiac arrest, provide artificial respiration promptly and correctly to save the patient's life. We will discuss the most common method.

27. **Mouth to Mouth Respiration(MMR).** The simplest and most common method, effective when given promptly.

- (a) Place the person on their back.
- (b) Clear the mouth and throat.
- (c) Extend the neck to straighten air passages.
- (d) Cover the patient's mouth with clean gauze and blow directly and slowly into it (10 – 12 times per minute).

Cardiopulmonary Resuscitation (CPR)











28. **CPR is for people experiencing a cardiac arrest.** A heart attack occurs when blood flow to the heart is blocked, but the person is still conscious and not yet in cardiac arrest. Cardiopulmonary Resuscitation (CPR) is an emergency procedure used when the heart stops to beat. It is a lifesaving technique which aims to keep blood and oxygen flowing through the body when a person's heart and breathing have stopped. CPR includes performing chest compressions and providing rescue breaths. Providing CPR immediately following a cardiac arrest can significantly increase the likelihood of survival.



29. As a Junior Cadet, if you ever find someone who may need CPR, it's important to stay calm and call for adult help right away. At your level, learning about CPR is great, but

doing it can be physically challenging and also risky for the patient, if done incorrectly. Always get a trusted adult or emergency medical services involved as quickly as possible. Your job is to get help fast — that alone can save a life.



    	<h2 style="margin: 0;">DANGER</h2> <p style="margin: 0;">Always check the danger to you, any bystanders and the victim. Make sure the surrounding is safe from harm</p>	 <div style="background-color: yellow; padding: 5px; width: 40px; margin: 0 auto;">112</div>
	<h2 style="margin: 0;">RESPONSE</h2> <p style="margin: 0;">Check for response by asking his name or squeeze his shoulder if he seems to be asleep. Call an emergency by dialing 112 for ambulance if he still unconscious</p>	
	<h2 style="margin: 0;">COMPRESSION</h2> <p style="margin: 0;">Pressing down firmly and smoothly (compressing to one third of their chest depth) 30 times and give 2 breaths at the speed of approximately 5 repeats in 2 minutes until the ambulance arrived</p>	
	<h2 style="margin: 0;">AIRWAY</h2> <p style="margin: 0;">Open the patient's mouth to check if there is any foreign material blocked the airway, tilt the victim's gently by using "Head Tilt – Chin Lift" method</p>	
	<h2 style="margin: 0;">BREATHING</h2> <p style="margin: 0;">Pinch the victim's nose to be closed while doing the mouth-to-mouth resuscitation and check for the chest rise. Give 2 breaths.</p>	

DID YOU KNOW?

- **The "Golden Hour" is Crucial.** The first hour after an injury or illness is critical, and prompt First Aid can significantly improve outcomes.
- You should never remove a penetrating object (like a knife or nail) from a wound. Doing so can cause more damage and increase bleeding. It's better to stabilize the object until medical help arrives.

PART III : IMPORTANCE OF FIRST AID KNOWLEDGE

30. **Importance of First Aid Knowledge for Cadets.** A few key points to be borne in mind by cadets are as follows:-

- (a) **Prompt Treatment.** Knowing first aid techniques enables cadets to provide prompt treatment, reducing the risk of complications and promoting faster recovery.
- (b) **Enhanced Safety.** First aid knowledge enhances safety during training, camping, and other activities, reducing the risk of accidents and injuries.



- (c) **Leadership Skills**. Cadets who learn first aid and wound care develop leadership skills, as they can take charge in emergency situations.
- (d) **Community Service**. Cadets can apply their first aid knowledge to help others in their community, promoting a sense of social responsibility.
- (e) **Prevention of Infections**. Proper wound care and first aid can prevent infections, which can be debilitating and even life-threatening.

HIGHER ORDER THINKING SKILLS (HOTS)

- In a situation with multiple casualties, how would you assess and prioritise administration of First Aid among several patients?
- Design a simple first aid kit for a typical outdoor NCC training exercise. What items would you include in the kit?
- Imagine a scenario where an unconscious person is lying on the road. What key observations and actions would you take before administering First Aid?

PART IV: PRACTICE ON CPR

ACTIVITY

1. ANO to conduct demonstration of CPR on a mannequin with the help of Institution's Medical Staff.
2. ANO to ensure practice by all cadets.

CONCLUSION

31. First Aid is a **lifesaving skill** that all NCC cadets must possess and practice. Whether dealing with a life-threatening emergency or a minor injury, the ability to act promptly and correctly makes a tremendous difference.
32. Mastery of First Aid principles not only ensures **individual safety** but also enhances **community resilience**.



SUMMARY

- First Aid helps preserve life, prevent further harm, and promote recovery.
- The Golden Hour is critical in emergencies—prompt action can save lives.
- CPR is essential for treating unconscious patients and those without a pulse.
- NCC cadets must stay calm, assess danger, and follow structured steps (CAB: Circulation, Breathing and Airway).
- First Aid knowledge builds leadership and community service skills in cadets

**ASSESSMENT EXERCISE****Multiple Choice Questions****Q1. What does ABC stand for in First Aid?**

- (a) Alert, Breathe, Control (b) Airway, Breathing, Circulation
(c) Apply, Bandage, Check (d) Assessment, Balance, CPR

Q2. Heimlich Manoeuvre is a first aid given in case of which emergency?

- (a) Electric Shock (b) Drowning
(c) Choking (d) Coma

Q3. What is the primary objective of First Aid?

- a) To cure the illness or injury
b) To preserve life, prevent further harm, and promote recovery
c) To provide a complete diagnosis of the injury
d) To replace medical professionals

Q4. Which of the following is NOT a sign of shock?

- (a) Cold, clammy skin (b) Rapid pulse
(c) Heavy sweating (d) Slow, strong pulse

Q5. What is the first action to take for a choking adult who cannot cough or speak?

- (a) Give water (b) Back blows and abdominal thrusts
(c) Check their pulse (d) Have them lie down

Q6. In case of an electric shock, what should you do first?

- (a) Pour water on the person (b) Pull them away immediately
(c) Turn off the power supply (d) Cover them with a blanket

Q7. Which of the following is a cause of asphyxia?

- a) Heart failure (b) Inhalation of poisonous gases
c) Skin burns (d) Dizziness

Q8. What is the best position for a person who has fainted?

- (a) Sitting with arms raised (b) Standing and moving
(c) Lying down with legs elevated (d) Seated upright against a wall

Q9. Which of the following is a life-threatening emergency?

- (a) Small cut on the finger (b) Nosebleed
(c) Cardiac arrest (d) Minor burn



Q10. Golden Hour refers to which of the following:-

- | | |
|--------------------------------|--------------------------------|
| a) Afternoon Hour | b) One hour prior to emergency |
| c) One hour after help arrives | d) One from the emergency |

Q11. Which method of artificial respiration is commonly used in First Aid?

- | | |
|-------------------------------|-----------------------|
| a) Mouth-to-mouth respiration | b) Chest compressions |
| c) Inhalation of oxygen | d) Abdominal thrusts |

Q12. Which of the following is a common symptom of shock?

- | | |
|-------------------------|-----------------------|
| (a) Increased alertness | (b) Rapid, weak pulse |
| (c) High blood pressure | (d) Excessive thirst |

Q13. A victim with bluish lips and nails may be suffering from:-

- | | |
|-----------------|--------------------|
| (a) Dehydration | (b) Fracture |
| (c) Asphyxia | (d) Minor bleeding |

Q14. Which of the following best describes a symptom of choking?

- | | |
|--------------------------|--------------------------------------|
| (a) Swollen limbs | (b) Difficulty speaking or breathing |
| (c) Numbness in the legs | (d) Sharp back pain |

Q15. 'Delirium' is applicable to which stage of consciousness?

- | | |
|---------------------|---------|
| (a) 3rd | (b) 1st |
| (c) 4 th | (d) 2nd |

Short Answer Questions

1. Define First Aid and list its three main objectives.
2. Describe the steps to take when encountering an unconscious person.
3. What precautions should be taken before administering First Aid?
4. Explain the significance of the "Golden Hour" in emergencies.
5. List three symptoms of asphyxia and how you would treat the condition.

Long Answer Questions

1. Describe the full CPR procedure for adults, children, and infants.
2. Discuss the role of NCC cadets in emergency First Aid and community service.
3. Explain the treatment steps for choking, electric shock, and drowning.
4. Why is it important to assess danger before administering First Aid? Give examples.
5. Elaborate on the causes, symptoms, and First Aid for unconsciousness.



PHYSICAL AND MENTAL WELLNESS (JD/JW)

CHAPTER PMW V : TYPES AND TREATMENTS OF WOUNDS

"Healing is not just the mending of a wound, but the restoration of strength, patience, and resilience."



TEACHING INSTRUCTIONS

Period	:	One (01)
Type	:	Lecture
Year	:	2nd Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/Lesson Plan: OHP, Screen, Presentation.

Time Plan

• Introduction	:	03 Mins
• Part I	:	04 Mins
• Part II	:	08 Mins
• Part III	:	09 Mins
• Part IV	:	12 Mins
• Conclusion	:	04 Mins





INTRODUCTION

1. Wounds, fractures, and minor injuries are common in everyday life, especially during outdoor activities and training. Knowing how to recognise different types of wounds and provide appropriate First Aid helps prevent complications, infections, and promotes faster recovery.

"The ultimate goal of wound care is to promote healing, prevent complications, and improve patient outcomes."

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Types of Wounds
- (b) Part II : Bleeding & Wound Care
- (c) Part IV : Bandaging Techniques
- (d) Part V : First Aid Kit Essentials

LEARNING OBJECTIVES

- Understand the types and classification of wounds.
- Learn First Aid techniques for cuts, bruises, burns, and fractures.
- Apply basic bandaging and dressing methods.
- Know how to handle minor animal and insect bites.
- Recognise items in a First Aid kit and their uses

INTERESTING FACTS

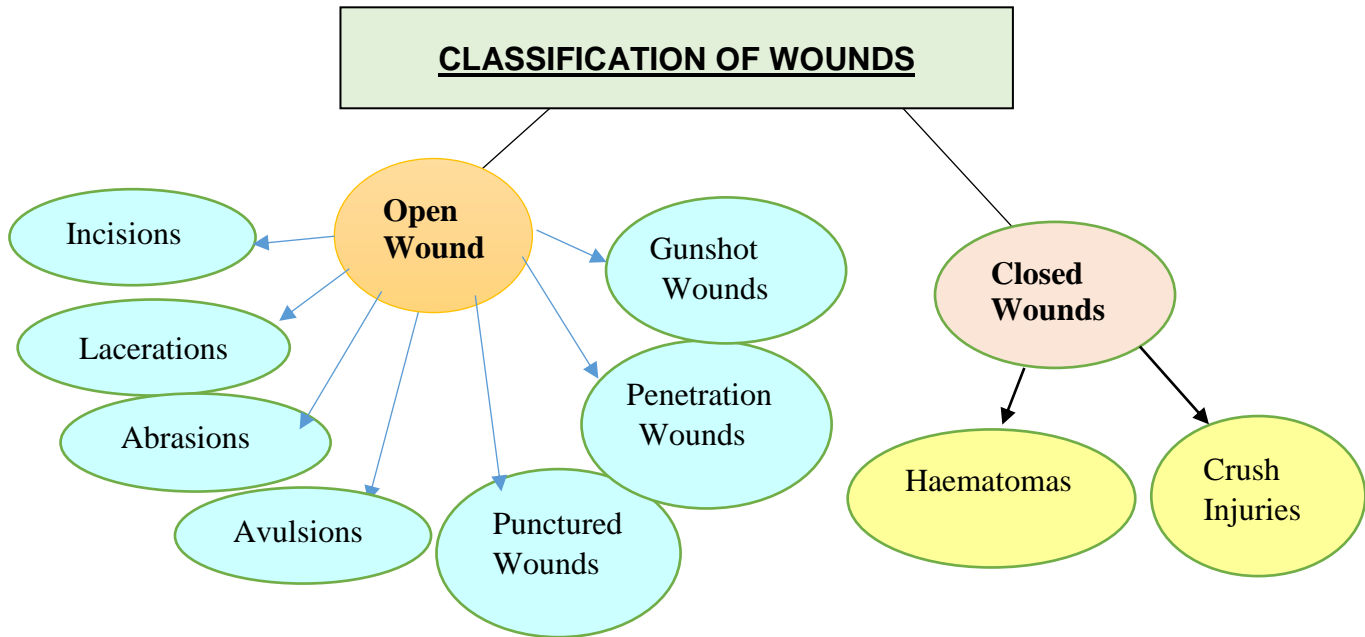
- Plasters were made from a number of materials, including clay or mud, herbs, and plants.
- Oil was another common ingredient used in plasters and provided some protection against infection, which also prevented the bandage from sticking to the wound.

PART I : INFECTIOUS DISEASES

2. **Wounds.** Wounds are breaks in the skin or muscle membrane caused by violence. Wounds can be classified in several ways based on their cause, depth, severity, and degree of contamination.

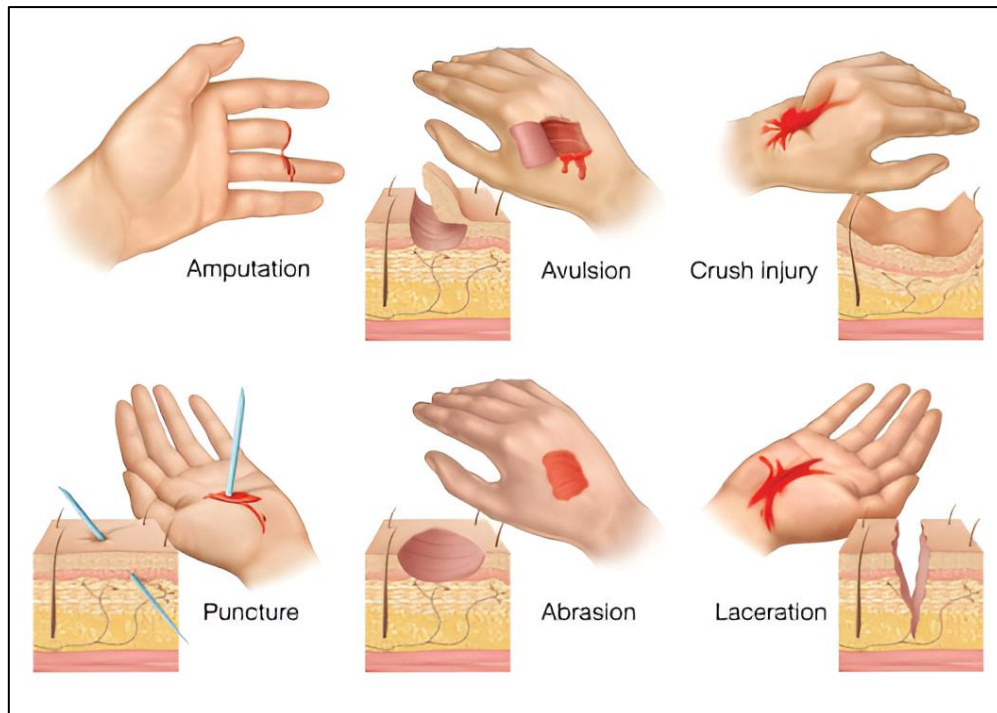
Primary Classification of Wounds

2. Primary classification of wounds, as open and closed wounds, is **based on their cause (and the resulting injury) :-**



4. **Open Wounds.** Open wounds can be categorised based on the object that caused the wound:-

- (a) **Incisions.** Caused by a clean, sharp-edged object such as a knife, razor, or glass splinters.
- (b) **Lacerations.** A wound characterised by torn or uneven edges, typically resulting from the impact of a blunt instrument. Lacerations and incisions can be linear (regular) or stellate (irregular). The term laceration is often incorrectly used to refer to incisions.
- (c) **Abrasions (Grazes).** These are superficial injuries where the outermost layer of the skin (the epidermis) is removed. Abrasions typically occur due to sliding falls onto rough surfaces.
- (d) **Avulsions.** Injuries where a body part is forcibly removed from its usual attachment, where an extremity is pulled off rather than cut off.
- (e) **Puncture Wounds.** Caused by an object puncturing the skin, such as a splinter, nail, or needle.
- (f) **Penetration Wounds.** Caused by an object, such as a knife piercing through the skin.
- (g) **Gunshot Wounds.** These are caused by a bullet or similar projectile penetrating or passing through the body. The sites of entry and exit may result in two wounds, known as a "through-and-through."



5. **Closed Wounds.** A Closed Wound or Contusion is a bruise where tissues are torn or ruptured without breaking the skin, typically caused by a blow or by a blunt instrument. Closed wounds, though fewer in categories than open wounds, pose significant risks. The basic types of close wounds include:-

- (a) Haematomas (also known as blood tumours).
- (b) Crush Injuries.

Haematomas (OR Blood Tumours)

- **Caused by damage to a blood vessel, which in turn causes blood to collect under the skin.**
 - Haematomas that originate from internal blood vessel pathology are petechiae, purpura, and ecchymosis. The different classifications are based on size.
 - Haematomas that originate from an external source of trauma are contusions. also commonly called

Crush Injuries

- **Caused by a great or extreme amount of force applied over a long period of time.**



Closed Wound

- First Aid Management



Rest the affected area. Movement may aggravate the closed wound condition.



Ice Compress. Apply ice compress to the affected areas. It promotes vasoconstriction and it has an anesthetic effect



Compression. Application of firm pressure. To avoid further hematoma.



Elevate the affected area. (For extremities) To promote venous return of blood and avoid pooling in the area



Splinting. For immobilizing the affected area. This helps in avoiding unnecessary movements.



PART II: BLEEDING AND WOUND CARE

6. **Treatment of Wounds.** The treatment of wounds involves medical and nursing practices to promote healing, prevent infection, and restore tissue function. It includes evidence-based procedures to manage wounds, reduce complications, and improve patient outcomes.

7. **Key Components of Treatment of Wounds/Injuries.**

- (a) **Assessment.** Evaluate the wound's size, depth, location, and severity.
- (b) **Cleaning and Debridement.** Removing debris, bacteria, and dead tissue to promote healing.
- (c) **Dressing and Bandaging.** Protecting wounds, promoting healing, and preventing infection.
- (d) **Wound Care.** Providing ongoing care includes monitoring for signs of infection, managing pain, and adjusting treatment plans as necessary.
- (e) **Rehabilitation.** Restoring function and mobility to the affected areas.

8. **Management of Wounds/Injuries.** The following procedures should be followed to provide effective first aid for managing wounds and injuries:

- (a) Position the patient comfortably.
- (b) Control any bleeding.
- (c) Remove visible foreign bodies if they can be easily extracted.



- (d) Apply a sterile dressing to prevent germs. For minor cuts and bruises, clean with antiseptic lotion and bandage.
- (e) Rest the part by using a sling.
- (f) Immobilise the affected area if the wound is extensive or complicated by a fracture.

POINTS TO REMEMBER

- Severe bleeding must be stopped immediately.
- Broken bones must be stabilised if the casualty is to be moved. Do not move a casualty with a suspected spine injury unless urgently required.
- Reassure the casualty and treat any other injuries as required.

9. **Injuries to Internal Organs.** Internal injuries are not visible and must be suspected when bleeding occurs within the chest or abdomen, potentially rupturing vital organs like the heart, lungs, liver, or spleen. Symptoms of internal injuries include:-

- (a) Cold, clammy skin.
- (b) Weak or rapid pulse.
- (c) Shallow breathing.
- (d) Pale, pinched face.
- (e) Sunken eyes with dark rings.
- (f) Restlessness, anxiety, possible loss of consciousness.

10. **Recognition.**

- (a) Trouble breathing
- (b) Shallow breathing
- (c) Tenderness at injury site
- (d) Chest deformity and bruising
- (e) Discomfort during movement, deep breathing, or coughing
- (f) Lips or nail beds appearing dusky or blue
- (g) May cough blood
- (h) Crackling sensation on the victim's skin

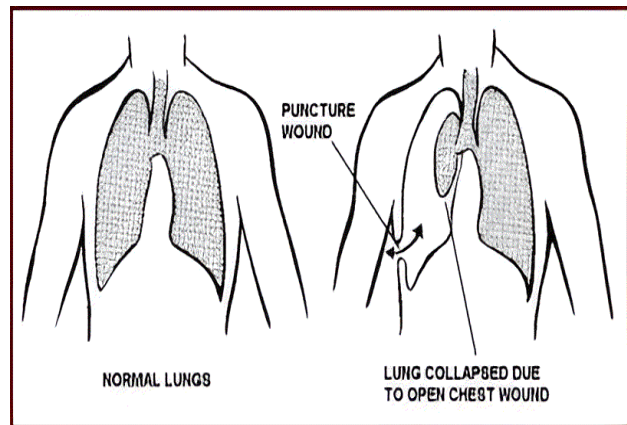
11. **Treatment.**

- (a) Call an ambulance
- (b) Help the victim get comfortable
- (c) Conduct a secondary survey
- (d) Monitor the patient's condition
- (e) Stay vigilant and alert for any changes.
- (f) If a flail segment is suspected, secure a bulky dressing tightly to stabilise the injury.

12. **Open Chest Wounds.** An open pneumothorax or sucking chest wound occurs when the chest wall is penetrated by an object such as a knife, bullet, or sharp item.

13. **Recognition.**

- (a) An open chest wound – air escaping.
- (b) Entrance and potential exit wound (exit wounds are typically more severe).
- (c) Difficulty breathing.
- (d) A sound is produced as air moves through an opening in the chest wall.
- (e) Blood or blood-stained bubbles may be released with each exhalation.
- (f) Coughing up blood.



14. **Treatment.**

- (a) Assess CABs and intervene if needed(As explained in previous chapter).
- (b) Do not remove embedded objects.
- (c) Contact emergency medical services immediately.
- (d) Position the victim laterally with the injured side facing downward.
- (e) Treat for shock.
- (f) Conduct a secondary survey.
- (g) Monitor vitals.



15. **Burns and Scalds.** Burns can be caused by dry heat (fire or flame), wet heat (hot water, fluids, steam), or chemicals (strong acids or alkalis). Scalding refers to burns from moist heat.

16. **First Aid Treatment.**

- (a) For chemical burns, ensure that water from a pipe or hose flows continuously over the affected area to thoroughly wash away the chemical.
- (b) Cover the burn with a clean towel or cloth.
- (c) Ensure the patient gets plenty of rest and fluids.
- (d) Provide reassurance to the patient and arrange for the patient's transportation to the nearest hospital or medical dispensary.
- (e) Do not apply ice, butter, or toothpaste.



Fractures

17. **Fractures.** Fractures or broken bones, are common injuries that can occur due to various reasons, such as falls, accidents, or direct blows to the body. They can range from simple breaks that cause minimal damage to the surrounding tissues, to more severe types that involve multiple fragments or pierce through the skin. Understanding the different types of fractures and their appropriate first aid measures is crucial in providing effective care and preventing further complications.

18. **Types of Fractures.** To effectively address fractures, one must first understand the various types that can occur. There are four types of fractures:

- (a) **Simple (Closed) Fracture.** The bone is broken but the skin is intact.
- (b) **Compound (Open) Fracture.** The broken bone pierces through the skin.



- (c) **Greenstick Fracture**. Partial fracture, common in children.
- (d) **Comminuted Fracture**. A comminuted fracture is a broken bone that's broken into more than two pieces. It's also known as a multi-fragmentary fracture.

19. **First Aid for Different Type of Fractures.**

- (a) **Do not move** the injured area unnecessarily.
- (b) **Immobilise** using splints (e.g., stick, plywood, cardboard) or any firm support.
- (c) **For open fractures**, cover the wound with a sterile dressing.
- (d) **Control bleeding** with gentle pressure if necessary.
- (e) Use padding to prevent further injury during transport.
- (f) Keep the patient calm and seek medical attention immediately.

PART III : ANIMAL AND INSECT BITES

Snake Bite

20. **Snake Bite**. Snakes inject poison through hollow, grooved fangs, often biting exposed limbs like hands, feet, and lower legs.

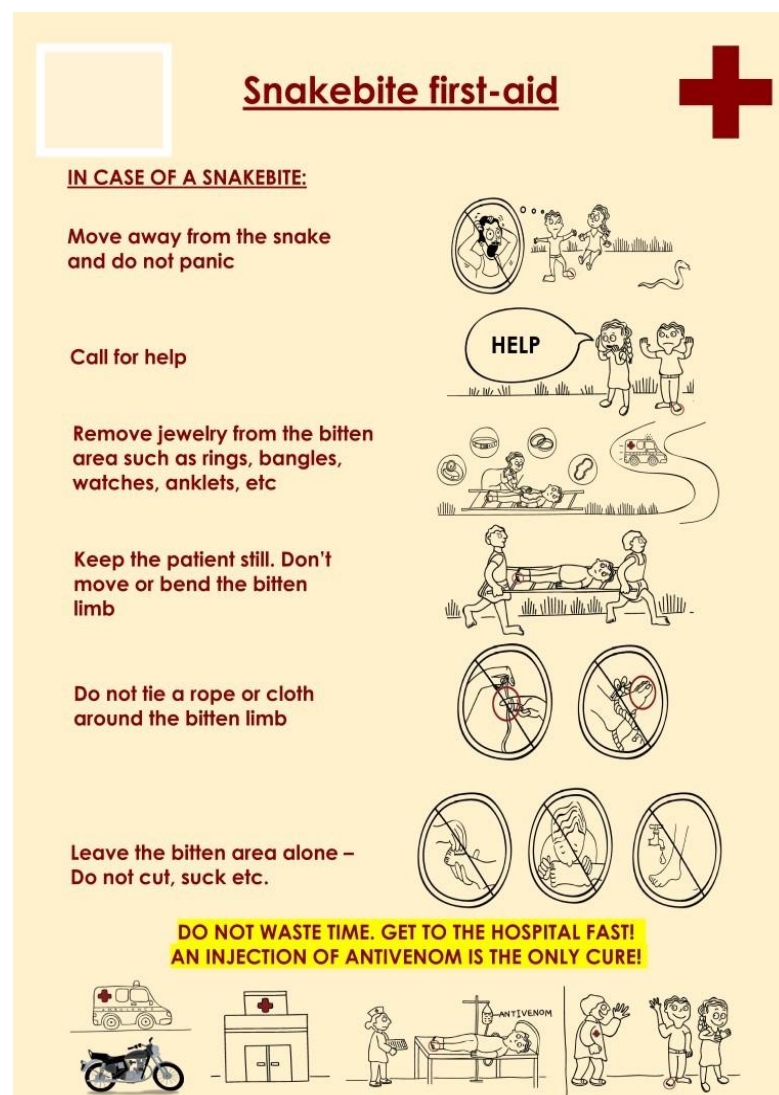
21. **First Aid Treatment**. Treat all snake bites as if they are poisonous. First aid should include the following steps:-

- (a) Keep the victim still
- (b) Clean the bite area gently with water.
- (c) Offer reassurance, don't allow panic to set in.
- (d) Monitor vital signs for shock, difficulty breathing, dizziness, nausea, or rapid pulse
- (e) Remove tight clothing or jewellery near bite site allowing for swelling and prevent constriction
- (f) If breathing stops, begin artificial respiration.
- (g) Quickly transport the patient to the nearest hospital or dispensary.
- (h) **Applying a tourniquet is no longer recommended in the case of a snake bite. This approach has been shown to cause more harm than good because of venom accumulation, increased tissue damage and limited effectiveness.**

22. **Snake Bites: Dos and Don'ts.** Are as given:-

(a) **Dos.** Keep the victim calm and still. Provide strong reassurance to alleviate fear of death. Seek **emergency medical help** immediately. Call an ambulance. Remove any items that are constricting the area, such as a ring or watch. Apply a **loose bandage** above the bite to allow slow venom spread. Raise the affected area above heart level. If breathing stops, initiate artificial respiration.

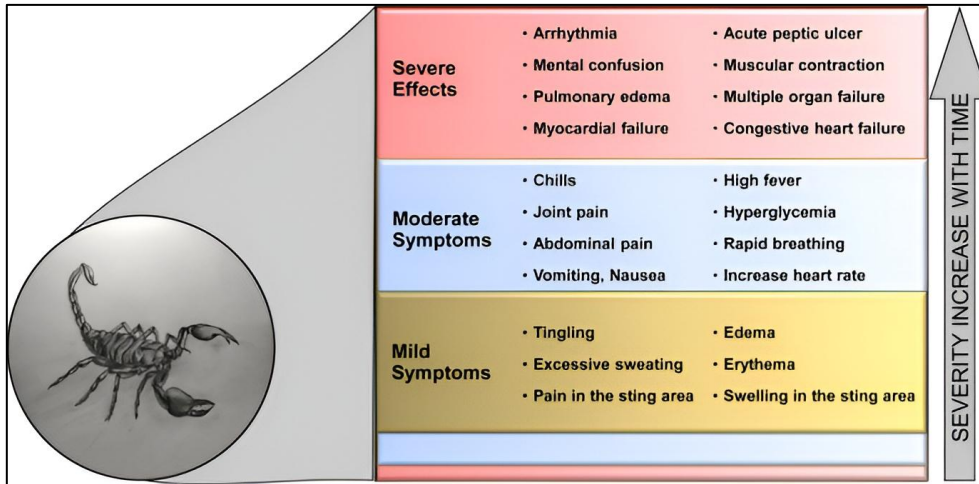
(b) **Don'ts.** Do not apply a tourniquet. **Do not cut or suck** the wound. Do not apply ice, as it may damage the tissue. Refrain from using a commercially available extraction device. Avoid using electrical therapy. Avoid using any lotion or ointments.



Scorpion Bite

23. **Treat scorpion bites like snake bites.**

24. **First-Aid.** Immobilise the patient until medical help arrives In case of bleeding, clean the wound thoroughly with water antiseptic lotion. Do not apply pressure on the area of the sting or cut the wound open.



25. **Rabid Dog Bite.** Rabies, transmitted by rabid dogs, is preventable with an anti-rabies vaccine.



26. **First Aid Treatment.**

(a) Thoroughly cleanse the bite area with a substantial amount of water and soap immediately.



- (b) Clean the wound using an available antiseptic.
- (c) The patient is recommended to receive an anti-rabies injection course at the hospital.
- (d) Observe both the dog and the patient for at least 10 days.

PART IV: BANDAGING TECHNIQUES

Bandaging

27. **General Principles and Rules.** Bandages made from flannel, calico, elastic net, or special paper, can also be improvised from stockings or ties. They serve various purposes:

- (a) Applying direct pressure on a dressing can help control bleeding.
- (b) Keep dressing and sling in place.
- (c) To minimise swelling.
- (d) Offer support for a limb or joint.
- (e) Restrict the movement.

28. **Application of Bandages.** Bandages should be applied with sufficient firmness to secure the dressing and splints in place, while ensuring they are not so tight as to cause harm or obstruct blood circulation. Indicators that bandages may be excessively tight include a bluish tinge in fingers or nails, and loss of sensation.

29. **Types of Bandages.** According to shape, there are two types of bandages:-

- (a) Triangular Bandages.
- (b) Roller Bandages.

30. **General Rules of Bandaging.**

- (a) Position yourself in front of the patient, except when bandaging the head or eyes.
- (b) Support the part being bandaged.
- (c) Use the correct width of bandage.
- (d) Place the outer side of the bandage on the area to be bandaged.
- (e) Start with an oblique turn, then secure the bandage with the next turn.
- (f) Start inside and work outwards and upwards.
- (g) Unroll a few inches of bandage at a time.



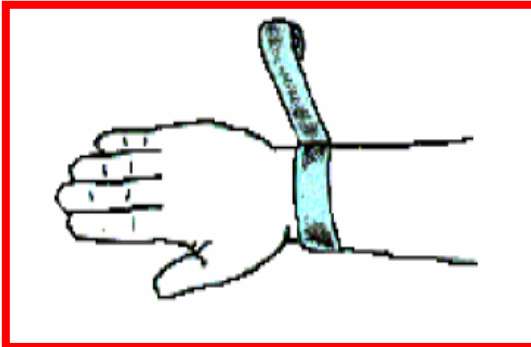
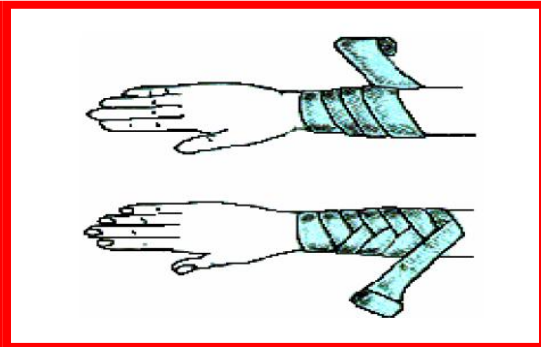
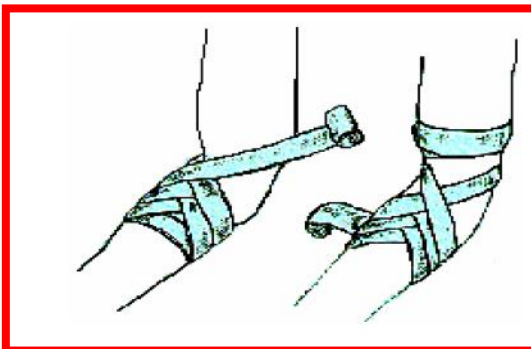
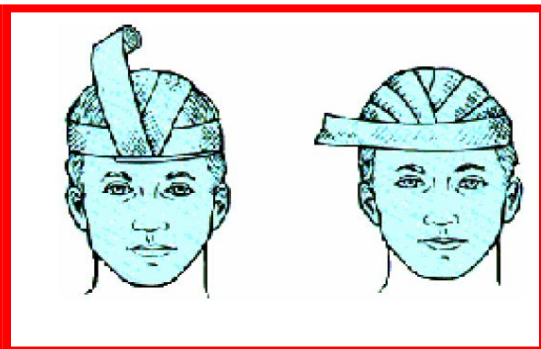
- (h) Cover two-thirds of previous turns evenly.
- (i) Finish the bandage using a reef knot, safety pin, or special fastening.
- (j) Avoid placing the knot on an injury or a bone.

31. **Common Mistakes While Using a Bandage.** Every effort should be made to avoid the following mistakes while applying a bandage:-

- (a) A wet bandage will shrink when it dries.
- (b) Uneven bandage tension can cause issues. A tight bandage restricts blood flow, causing tissue death. A loose bandage may shift out of place.
- (c) Avoid reversing turns over a prominence or wound, as this can cause discomfort and pain for the patient.
- (d) Excessive bandage use causes discomfort and increases cost.
- (e) Improperly securing bandage ends can cause harm.

32. **Types of Turns of Bandages.**

- (a) **Circular.** A circular turn involves wrapping the bandage around the body part in a circular motion, typically in one place or over a small area. It is often used to cover small injuries or to anchor the beginning and end of the bandage. Its purpose is to Secure the bandage in place and prevent it from unravelling.
- (b) **Spiral.** The bandage follows a helical or spiral path around the limb and is typically used on cylindrical body parts like the arms, legs, or fingers.
- (c) **Reverse Spiral.** The reverse spiral is similar to the spiral turn but direction of the bandage is alternated at each pass, creating a zig-zag pattern. It is typically used on conical-shaped body parts, such as the lower leg or forearm. Its purpose is to help provide more secure coverage and a more fitted bandage around the limb's tapering shape.
- (d) **Figure-of-Eight.** This type of bandaging involves wrapping the bandage around the body part in a figure-eight pattern, crossing over the joint or the area that needs to be secured. Its commonly used for joints like the knee, elbow, or ankle. The figure-of-eight turn provides better immobilization for joints.
- (e) **Recurrent.** A recurrent turn is a type of bandage turn used to cover a stump or a rounded area, such as the head, residual limb, or a circular body part like the wrist or ankle. It involves wrapping the bandage back and forth over the area in a series of overlapping turns, creating a pattern that repeats on itself. It is used for covering areas that do not have a clear cylindrical or conical shape, like the ends of limbs (stumps) or the head.

Circular**Spiral and Reverse-Spiral****Figure-of-Eight****Recurrent**

PART V : FIRST AID KIT ESSENTIALS

33. **Practice and Raise Awareness.** Cadets should practice First Aid techniques for various wounds/injuries daily and promote health awareness in society. The following paragraphs summarise the basic injuries/wounds and their First Aid techniques.

34. **Essential First Aid Techniques.**

<u>Ser. No.</u>	<u>Wound/Injury</u>	<u>First Aid technique</u>
(a)	<p><u>Cuts and Lacerations.</u> Injuries caused by sharp objects, such as knives, glass, or metal.</p>	<p>(i) <u>Bleeding Control</u></p> <ul style="list-style-type: none"> • <u>Direct Pressure.</u> Apply direct pressure to the wound using a clean cloth or gauze. • <u>Elevation.</u> Raise the injured limb above heart level to decrease blood flow. • <u>Tourniquet.</u> Use a tourniquet if direct pressure and elevation don't control bleeding. <p>(ii) <u>Wound Care.</u></p> <ul style="list-style-type: none"> • <u>Clean the Wound.</u> Rinse with clean water and mild soap. • <u>Apply Antibiotic Ointment.</u> Use a thin



		<p>layer to prevent infection.</p> <ul style="list-style-type: none"> • <u>Cover the Wound.</u> Apply a sterile bandage or dressing.
(b)	<p><u>Bruises and Contusions.</u> Injuries from falls or blows.</p>	<p>(i) Keep the person still. Have them lie down with their head and shoulders slightly elevated. Only move if absolutely necessary.</p> <p>(ii) Control bleeding by applying firm pressure to the wound using sterile gauze or a clean cloth.</p> <p>(iii) Monitor changes in breathing and alertness. If the individual shows no signs of circulation, such as no breathing, coughing, or movement, begin CPR.</p>
(c)	<p><u>Sprains and Strains.</u> The overstretching or tearing of muscles and ligaments.</p>	<p>The primary treatment for sprains and strains is RICE: Rest, Ice, Compression and Elevation.</p>
(d)	<p><u>Fractures and Dislocations</u> <u>Fractures.</u> Bone breaks in arms, legs, ribs, etc. <u>Dislocations.</u> Misaligned joints like shoulders, elbows, etc.</p>	<p>(i) <u>Immobilise the Injured Area:</u> Use a splint or sling to stabilise.</p> <p>(ii) <u>Apply Cold Packs:</u> Use cold packs to reduce pain and swelling.</p>
(e)	<p><u>Head Injuries.</u> Cuts, bruises, or fractures to the head.</p>	<p>(i) Apply firm pressure to the wound with sterile gauze or a clean cloth. Don't apply direct pressure to the wound if you suspect a skull fracture.</p> <p>(ii) Use sterile gauze or a clean cloth to apply firm pressure to the wound. Avoid applying direct pressure if a skull fracture is suspected.</p>
(f)	<p><u>Burns and Scalds.</u> (i) <u>Thermal Burns.</u> Burns from heat, flames, or hot surfaces. (ii) <u>Scalds.</u> Burns from hot liquids or steam.</p>	<p>(i) <u>Cool the Burn.</u> Run cool water over the burn for 10-15 minutes.</p> <p>(ii) <u>Apply Topical Ointment.</u> Use antibiotic ointment to prevent infection.</p> <p>(iii) <u>Cover the Burn.</u> Protect with a non-stick, sterile dressing.</p>
(g)	<p><u>Ankle and Knee Injuries.</u> Twists, sprains, or strains.</p>	<p>(i) Apply an ice pack (or frozen vegetables in a tea towel) to the injury for 20 minutes every 2-3 hours.</p> <p>(ii) Wrap a bandage around the injury for support and keep it elevated on a pillow.</p>



(h)	<u>Back Injuries.</u> Strains, sprains, or fractures.	(i) If unsure, treat any injury as a fracture. (ii) Elevate the injured area. (iii) Get medical help.
(j)	<u>Heat-Related Illnesses.</u> Heat exhaustion or heat stroke.	Relocate the person to a cool, shaded area and give them water.
(k)	<u>Cardiac Emergencies.</u>	(i) CPR (Cardiopulmonary Resuscitation): Perform if unresponsive and not breathing. (ii) Use an AED (Automated External Defibrillator): Use if available.
(l)	<u>Seizures.</u>	Ensure the person's safety and comfort during the seizure.
(m)	<u>Allergic Reactions.</u>	Use an 'EpiPen' or auto-injector to administer measured dose of epinephrine.
(n)	<u>Eye Injuries.</u> Cuts, scratches, or foreign objects in the eyes.	(i) Avoid rubbing your eyes. Lift the upper eyelid over the lower and roll your eyes. (ii) Rinse your eyes with water, keeping them open. (iii) Repeat until the object is removed. (iv) See a doctor to ensure no debris remains and eyes are undamaged. (v) If an object is embedded, do not remove it. Cover the eye and get medical help.
(o)	<u>Dental Injuries.</u> Tooth damage or loss.	(i) Rinse mouth with warm water. (ii) Hold the tooth by the crown and wash it in water. (iii) Place the tooth back in the socket using gauze. (iv) If that fails, store the tooth in milk, saliva, or lukewarm salt water. (v) Control bleeding with a sterile cloth. (vi) Seek emergency medical or dental help.

35. **First Aid Kit.** Everyone should have a well-stocked first aid kit handy. The contents of your kit will vary depending upon the number of people it is designed to protect, as well as special circumstances where it will be used.



36. Essential Contents for a First Aid Kit.

- (a) Adhesive bandages (plasters)
- (b) Sterile gauze pads and rolls
- (c) Antiseptic solution (e.g., Dettol or Betadine)
- (d) Scissors and tweezers
- (e) Safety pins and adhesive tape
- (f) Gloves, cotton, and a digital thermometer
- (g) First Aid manual or instructions



HIGHER ORDER THINKING SKILLS (HOTS)

- **Imagine you are in a field training exercise and a cadet suffers both, a laceration and a suspected fracture. Which injury would you address first, and why?**
- **You are a first responder at a scene where a person has both a burn injury and a broken arm. What steps would you take to treat both injuries at the same time?**
- **Imagine a scenario where an unconscious person is lying on the road. What key observations and actions would you take before administering First Aid?**

CONCLUSION

37. In conclusion, mastering wound care—including accurate identification, proper cleaning, and effective bandaging—is crucial not only for individual recovery but also for overall group safety in NCC training and daily life.

38. This chapter has provided practical guidance on handling various types of wounds, treating burns and fractures, and managing minor injuries efficiently. By understanding and applying these techniques, cadets can significantly reduce complications, prevent infections, and ensure better healing outcomes. This knowledge also reinforces the value of preparedness, leadership, and community service in emergency situations.



SUMMARY

- **Wound Classification.** Distinguishing between open and closed wounds is essential for choosing the correct treatment.
- **Bleeding & Wound Care.** Immediate actions such as applying direct pressure and maintaining cleanliness are critical to prevent infections.
- **Burns & Scalds.** Cooling the wound with water and covering it with a sterile dressing helps mitigate tissue damage.
- **Fractures & Dislocations.** Proper immobilization and stabilization are vital for reducing further injury and ensuring proper healing.
- **Animal & Insect Bites.** Appropriate First Aid for bites involves cleaning, applying cold compresses, and seeking further medical intervention when needed.
- **Bandaging Techniques.** Effective bandaging provides support, controls bleeding, and minimizes swelling, while adherence to best practices prevents additional harm.
- **First Aid Kit Essentials.** A well-stocked kit is fundamental to successfully manage minor injuries in the field.

**ASSESSMENT EXERCISE****Multiple Choice Questions**

Q1. Which of the following best describes an abrasion?

- (a) A deep puncture wound
- (b) A superficial wound caused by scraping
- (c) A clean, straight cut
- (d) A tissue tear due to blunt trauma

Q2. What is a key characteristic of a laceration?

- (a) Clean, straight edges
- (b) Irregular or jagged edges
- (c) A superficial scrape
- (d) A wound with minimal bleeding

Q3. Which type of fracture is characterised by the bone breaking into several fragments?

- (a) Simple fracture
- (b) Compound fracture
- (c) Greenstick fracture
- (d) Comminuted fracture

Q4. For an open fracture, what is the first aid recommendation?

- (a) Immediately realign the bone
- (b) Cover the wound with a sterile dressing
- (c) Apply direct pressure to the bone
- (d) Massage the affected area

Q5. What is the main purpose of applying a splint to a fractured limb?

- (a) To reduce pain by massaging the area
- (b) To immobilise the fracture and prevent further injury
- (c) To allow immediate movement of the injured limb
- (d) To cool the affected area

Q6. Which of the following is a proper step in treating burns?

- (a) Apply ice directly to the burn
- (b) Cool the burn under running water
- (c) Cover the burn with butter
- (d) Wrap the burn tightly with a bandage

Q7. In the management of animal bites, what is an essential first step?

- (a) Immediately apply a tourniquet



- (b) Wash the area thoroughly with soap and water
- (c) Squeeze the bite to remove venom
- (d) Apply a hot compress

Q8. What is the purpose of using a figure-of-eight bandage?

- (a) To secure a dressing on a circular wound
- (b) To support a joint like the ankle or elbow
- (c) To immobilize a fractured finger
- (d) To cover a large area uniformly

Q9. Which component is NOT typically found in a First Aid kit for wound care?

- (a) Adhesive bandages
- (b) Sterile gauze pads
- (c) Antiseptic solution
- (d) Cooking oil

Q10. What is a haematoma?

- (a) A type of open wound
- (b) A collection of blood outside blood vessels
- (c) A superficial scrape
- (d) An infection caused by bacteria

Q11. How should you control bleeding from a wound?

- (a) Apply direct pressure with a clean cloth
- (b) Elevate the limb only
- (c) Immediately apply a tourniquet in all cases
- (d) Use water to rinse the wound first

Q12. What is the primary goal of dressing a wound?

- (a) To cover and protect the wound
- (b) To stop the pain
- (c) To increase blood flow
- (d) To remove all bacteria from the wound

Q13. Which statement about abrasions is true?

- (a) They always require surgical treatment
- (b) They are deep wounds that affect muscles
- (c) They usually involve only the epidermis
- (d) They require immobilization with a splint

**Q14. What does the term “bandaging” refer to?**

- (a) Cleaning the wound only
- (b) The application of a dressing secured by a bandage
- (c) Administering pain medication
- (d) Performing CPR

Q15. Why is it important to regularly check the circulation beyond a bandaged area?

- (a) To ensure the bandage is very tight
- (b) To make sure the dressing does not shift
- (c) To avoid constriction that can lead to tissue damage
- (d) To promote increased blood flow immediately

Short Answer Questions

- Q1. Define the difference between open and closed wounds with examples.
- Q2. List and explain the steps you would take to manage a superficial abrasion.
- Q3. Describe the key differences between a simple fracture and a compound fracture.
- Q4. Explain why proper bandaging is crucial in wound management.
- Q5. What are the essential items in a First Aid kit for treating minor injuries, and why is each important?

Long Answer Questions

- Q1. Explain in detail the classification of wounds (open vs. closed) and discuss the primary first aid treatments for each type, including the importance of preventing infection and promoting healing.
- Q2. Describe different bandaging techniques (circular, spiral, figure-of-eight, recurrent) and discuss the rules for proper bandaging. Explain how improper bandaging can affect wound healing.
- Q3. Discuss the types of fractures (simple, compound, greenstick, comminuted) and elaborate on the first aid procedures for managing fractures. Include how you would immobilise the injury and manage any associated bleeding.
- Q4. Compare and contrast the first aid treatments for snake bites, dog bites, and scorpion/insect bites. Explain the rationale behind each treatment step and the potential complications if not managed properly.
- Q5. Evaluate the importance of having a well-stocked First Aid kit. Describe the key items that should be included and justify how each item contributes to effective emergency care.

PHYSICAL AND MENTAL WELLNESS (JD/JW)

CHAPTER PMW VI: MENTAL WELLNESS

“Action dispels fear”



TEACHING INSTRUCTIONS

Period : Two (02)
Type : Lecture
Year : 1st Year JD/JW
Conducting Officer : Associate NCC Officer
Training Aids : Script/Lesson Plan; OHP, Screen, Pointer Staff, Presentation; Chart/Posters on Mental Wellness.

Time Plan

- Introduction : 05 Mins
- Part I : 20 Mins
- Part II : 15 Mins
- Part III : 12 Mins
- Part IV : 12 Mins
- Part V : 12 Mins
- Conclusion : 04 Mins





INTRODUCTION

1. The Latin quote, '**mens sana in corpore sano!**' (A healthy mind in a healthy body) emphasizes the interconnectedness of physical and mental well-being, suggesting that a healthy body contributes to a healthy mind and holistic well-being. Mental wellness is the foundational element of overall wellness as it shapes how individuals interpret experiences, manage emotions, and navigate challenges.

2. Friendships are vital to emotional and mental wellness, with real-life connections offering deeper, more meaningful support than virtual ones. Excessive screen time, especially among young people, can disrupt sleep and create a harmful cycle that affects mental health. Taking moments of pause and seeking healing through nature, alongside traditional approaches, can help restore balance in today's fast-paced world.



LEARNING OBJECTIVES

- Understand the role of Emotional Wellness.
- Learn the importance of Real Friends vis-à-vis Virtual Friends.
- Understand the positive effects of balanced screen time.
- Make lifestyle adjustments and time management for better sleep hygiene.
- Connect with nature for a healthy state of mental wellness.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Emotional Wellness
- (b) Part II : Real Vs Virtual Friends
- (c) Part III : Reducing Screen Time
- (d) Part IV : Sleep Hygiene
- (e) Part V : Connect with Nature

INTERESTING FACTS

- People with strong social connections live longer, healthier lives.
- Humans can survive longer without food than they can without sleep.
- Just 20 mins in a park lower stress levels and improve one's mood.
- A healthy diet supports mental wellness while a poor diet can exacerbate symptoms like anxiety and depression.

PART I : MENTAL WELLNESS

3. Mental Wellness is a holistic concept made up of interconnected elements like spiritual practices, healthy eating, exercise, safety, substance abuse prevention, environmental care, disease prevention, and stress management, all required for overall wellness. Mental wellness refers to a state of psychological and intellectual balance that enables an individual to think clearly, make informed decisions, and maintain concentration.

4. Wellness falls into seven key components: physical, emotional, mental, social, environmental, occupational, and spiritual. Mental wellness is the foundational element of overall wellness as it shapes how individuals interpret experiences, manage emotions, and navigate challenges.



5. **Factors Affecting Mental Wellness.**

Mental wellness is influenced by various factors that shape how we manage stress, build relationships, and cope with life's challenges.

Understanding these factors can help us nurture a healthier and more balanced mental state. The factors include:-

- (a) **Biological Factors.** Mental wellness can be influenced by genetic predispositions, chemical imbalances in the brain, and chronic or neurological health conditions.
- (b) **Emotional Regulation.** The ability to manage stress and emotions, and to bounce back from challenges, plays a key role in maintaining mental health.
- (c) **Lifestyle and Habits.** Good mental health is supported by sleep hygiene, proper nutrition, regular physical activity, and avoiding harmful substances like alcohol and drugs.
- (d) **Social Environment.** Positive relationships with real friends and a sense of belonging promote wellness, while isolation, discrimination, or toxic interactions can negatively impact mental health.
- (e) **Psychological Factors.** Healthy self-esteem, constructive thinking patterns, and the ability to process past trauma contribute to a stronger mental state.
- (f) **Environmental Conditions.** Living in a safe, clean, and stable environment with access to natural spaces enhances mental well-being, while constant exposure to stressors can be harmful. So, connecting with nature is very important.



(g) **Spiritual and Philosophical Outlook.** A sense of purpose, alignment with personal values, and inner peace cultivates resilience and emotional balance.

Dealing with Mental Distress

6. **Signs of Mental Distress.** Status of mental wellness can be figured out when an individual:-

- (a) Avoids eye contact and interaction.
- (b) Have an aversion to a physical affection.
- (c) Does not smile in situations calling for such a response.
- (d) Does not show any remorse despite showing unwarranted behavior.
- (e) Carries no emotional reaction when left alone.
- (f) Shows anger in the form of tantrums or passive aggressive behavior.
- (g) Lacks interests in recreational activities.



7. **Techniques to Manage One's Mental State.** The following are the skills/techniques to identify one's present state of mental wellness, and practices to be followed by any person to manage it:-

- (a) **Self-Introspection.** Self-introspection enables individuals to understand the reasons behind their responses to situations or interactions. This capacity can assist in resolving conflicts by differentiating the emotion from the specific circumstances.
- (b) **Acceptance.** It is the capacity to acknowledge one's feelings without excessive contemplation. This can facilitate more rational responses to situations that elicit particular mental behaviour.



- (d) **Perspective.** Adopting a more expansive viewpoint can assist in managing your mental responses by considering them within a larger frame of reference.
- (e) **Empathy.** Empathy, the ability to understand and share the feelings of others based on one's own experiences, is vital for building fulfilling relationships and avoiding conflicts in any form of settings.

8. Benefits of Mental Wellness.

(a) **Better Stress Management.** Helps in managing and reducing stress more effectively. By being mentally aware, one can identify the early signs of stress and apply techniques such as deep breathing, mindfulness, or problem-solving to mitigate its impact, preventing stress from becoming overwhelming.

(b) **Stronger Relationships.** Establishes deeper and more meaningful connections with others. Mental wellness enhances one's emotional expressions that lead to better empathy and understanding, allowing people to engage more deeply in relationships.



(c) **Boosts Self-Esteem.** Boosts self-awareness and confidence, leading to a more positive self-image. Mental wellness boosts confidence, helping people accept themselves and pursue their goals with a positive outlook and strong belief in their abilities.

(d) **Increased Resilience.** Encourages the ability to recover from setbacks and challenges with a positive attitude. Mental wellness strengthens resilience, making it easier to face and overcome life's challenges.

(e) **Sharper Mental Focus.** Enhances clarity of thought and improves decision-making skills. With mental wellness, individuals experience better clarity in their thoughts and decision-making processes. When emotions are well-managed, there is less mental clutter, it improves concentration and productivity.



(f) **Emotional Stability.** Mental wellness ensures mental balance and reduces feelings of anxiety or depression. With emotional stability, individuals are better equipped to handle everyday stress without feeling overwhelmed.

(g) **Healthier Body.** Lowers the likelihood of stress-related physical ailments by maintaining good emotional health. Mental wellness is closely linked to physical health. When an individual's mental state remains balanced, the body experiences less tension and stress, lowering the likelihood of developing stress-related ailments such as headaches, high blood pressure, or digestive problems.

(h) **Improved Communication.** Mentally balanced individuals are better at expressing their emotions clearly and listening with empathy. This leads to healthier communication, which fosters stronger relationships.



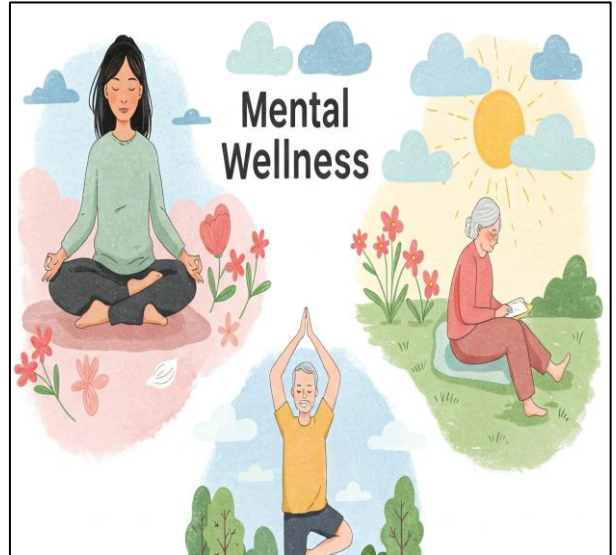
- (j) **Enhanced Coping Mechanisms**. Mental wellness equips individuals to cope with life's inevitable challenges through problem-solving skills, emotional regulation techniques, or seeking social support.
- (k) **Sound Sleep**. Mental balance ensure restful, regular sleep that leaves one feeling refreshed. A good state of mental wellness promotes relaxation, reduces stress and anxiety, and helps regulate mood-related chemicals like serotonin and melatonin— essential for quality sleep.
- (l) **General Feeling of Hope, Optimism and Motivation**. When the mind is well- balanced, individuals demonstrate greater resilience, a clear sense of purpose, and increased confidence in overcoming life's challenges.

Case Study : 'Smarty' Shines Again

9. **Background**. Cdt 'Smarty' was a motivated NCC cadet, studying in third year of graduation. Holding aspirations of becoming an Army Officer, Smarty was a regular in NCC classes and participated actively in miscellaneous NCC events. Being good in sports apart from academics, he was a fairly known figure in his college, as also on social media, where he had built a following of over 80,000 fans through daily workout tips, motivation clips, and transformation reels. Known for his energy and charisma, Smarty was not just a content creator—he became a teen influencer in his city. Over the past two months however, his participation in NCC activities had diminished and his absence from parades had started increasing. This had his ANO, Mr 'Keen-Eye,' really concerned, because Smarty was not being seen around much otherwise also, not even with his best friend, Cdt 'Sincere'.

10. **The 'Crisis'**. ANO Keen-Eye decided to meet Smarty to know what was going on. After several attempts, he could finally locate him one evening sitting alone in the football field. Smarty seemed reluctant to talk but ANO Keen-Eye was persistent. Eventually he opened up and revealed that till about three-four months back everything was going fine but then a viral video he made was misunderstood and labelled "toxic motivation". Backlash spread quickly, and within weeks, his followers dropped by nearly 50,000. The algorithm also stopped favouring his content and his popularity plummeted. He went through a period of intense self-doubt and identity crisis. **"Am I not good enough anymore?"** Since he had started tying his **self-worth to the numbers of 'likes'**, a dip in that triggered intense self-questioning. It felt like he was losing his purpose. While he could handle the trolls who mocked him with jabs like 'You have lost it!', it was when those that he had considered as his most **loyal fans** de-subscribed/drifted away, that Smarty started feeling totally **'abandoned'**. **The increased pressure to stay 'relevant' led to bouts of anxiety, depression, and eventually to social withdrawal.** He stopped posting entirely, started skipping classes & workouts, became withdrawn and avoided friends including Cdt Sincere.

11. **The Turning Point.** ANO Keen-Eye had a good understanding of inter-personal relations. He listened to Smarty patiently and then spoke - reminding him about his purpose as to why he started; that name and fame can't be chased and were often a by-product of following one's passion and still not certain; that while having followers on social media was ok, it was a bad idea to derive one's sense of self-worth from them; that between his family and a staunch friend like Cdt Sincere, Smarty still had his 'support system' intact and that, when the spotlight dims, it often reveals what we are made of underneath.



12. **The 'Bounce-Back'.** The conversation sparked something in Smarty. He 'reconnected' with his purpose and decided to start afresh and stay true to his core values. He started slow, doing it for himself, focussing on fitness not for amassing numbers but as a therapy, as its own reward. He stayed off social media, choosing to spend more time with Sincere. ANO Keen-eye mentored him personally and with his guidance, over the course of next few weeks, Smarty was able to build a core community of like-minded enthusiasts. With regained confidence, Smarty returned to content—but this time with a shift. He launched a new series: "**Fitness After Failure**", focusing on mental health and physical recovery. The content was more authentic, honest, and slow-paced. His audience, though smaller now, was far more engaged. He ended up gaining back 10,000 followers, but this time numbers mattered little to him. He had gained himself back!

13. **Key Lessons.**

- (a) The idea of 'acceptance' by others is misplaced. Sense of self-identity and self-esteem should stem from our core values and what we are from inside.
- (b) Seeking validation from 'Numbers' can crush a young creator's self-worth, but healing/recovery is possible.
- (c) Emotional resilience isn't built in the spotlight—it's built in quiet recovery. Life's hardest battles are often fought against oneself.
- (d) Integrity of purpose is vital. Redefining success around purpose and effort, is a powerful comeback tool. 'Name/Fame' are incidental and variable.
- (e) Support of friends and well-wishers is a great source of strength.

PART II : REAL VERSUS VIRTUAL FRIENDS

14. Friendships are key to emotional wellness and personal growth. As people grow, their relationships help shape their character. Impersonal virtual connections may have their value in terms of getting to know people and networking, however it is the real-life friendships that provide deeper & meaningful connections and tend to act as a safety valve against life's ups and downs.

15. **Real Friend**. A real 'friend' is someone you like meeting & spending time with, can confide in, and have a personal conversation sharing your joys and sorrows with equal ease. They tend to act as your support system during tough times. They could be anyone including your family members.



16. **Virtual Contacts**. This term is used for virtual or online 'contacts', which social media terms as 'friends'. Social and professional networking sites facilitate the building of 'online acquaintances'. While social media may term these as a 'friend', they hardly qualify to be so in absence of any personal connect.

17. Here a distinction between the two is warranted. **It is not to say that one can't meet or connect with a real friend online or in a virtual mode, or that connecting with our best friend online, turns him/her into a 'virtual contact'**. Distance or medium of connection hardly matters in real friendships and they remain strong despite such barriers. **The distinction lies in the depth and understanding we have with our real friends as compared to our virtual contacts.** One of the reason why interactions with virtual contacts may remain mostly 'superficial' is the **medium of exchange of information, which is mostly text/message**. Even when it is a call, its either in formal settings for anyone to bother or is so infrequent that the **listener can't differentiate between the caller's usual self or him/her sounding different on a particular day, a cue which a real friend is unlikely to miss and probe.**



18. Mental/emotional heaviness occurs when we overthink, magnify our problems multi-fold and stay bottled up. Sharing our concerns or issues with a willing listener is like already addressing half the problem. This is where 'real' friends often come to our rescue who can listen empathically, can relate to what we are going through and provide a safe space for us to vent out our feelings and lighten our mental burden. While impersonal virtual connections may give a temporary high with '**likes**' or '**comments**', they firstly can never give a lasting joy and secondly tend to put us into an addictive '**validation loop**', eventually placing our self-esteem in other's hands.



19. For making personal connections stronger, remember that **‘a call is better than a text message, and meeting personally is even better than a call’**.

20. **Effects of Excessive Virtual Interactions.** Can be as under:-

- (a) **Loss of Physical Health.** Spending long hours interacting with virtual contacts negatively affects physical health, leading to **sedentary lifestyles and general weariness.**
- (b) **Erosion of Real-World Social Skills.** Over-reliance on virtual interactions can lead to social awkwardness or **discomfort in face-to-face communication.** **The real loss is of the urge to work on real-world relationships to make them work, and finding online connections more ‘convenient’.**
- (c) **Impact on Mental Well-Being.** Excessive online interaction may turn individuals into **social-recluses, leading to real-time social isolation.**
- (d) **Dopamine Overload.** Likes, comments, and messages provide a quick dopamine hit—the brain’s reward chemical. This can create addiction-like behaviour, leading to **irritability or low mood when offline.**
- (e) **Increased Anxiety and Stress** Constant notifications, messages, and the pressure to stay "online" can lead to **mental fatigue.** Fear of missing out (**FOMO**) and the need to stay connected can **heighten anxiety levels.**
- (f) **Lowered Self-Esteem.** Continuous exposure to ‘curated’, filtered lives of others can trigger **comparison traps.** Feeling “less successful” or “not good enough” can lead to **self-doubt and insecurity.**
- (g) **Increased Loneliness.** Ironically, being constantly connected online can make people feel **more isolated** in real life. The lack of authentic and empathetic interaction can leave one with a sense of **emotional emptiness**

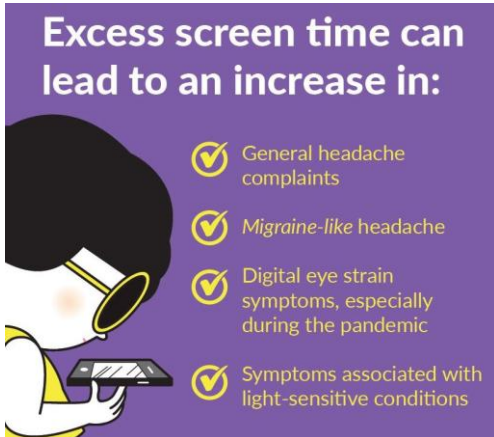
21. Contacts do have their value in terms of enhancing our social or professional network. Their numbers also may be more than *Friends* but connection and communication with *them* stays restricted and limited. ***Friends, even when far lesser in numbers, can provide deep emotional support and social interaction that enhances our well-being in tangible ways.***

PART III : REDUCING SCREEN TIME

22. **Screen Time.** The amount of time spent using a device with a screen, such as a smartphone, computer, television, video game console, or a tablet, is referred to as screen time.

Harmful Effects of Excessive Screen Time

23. There is a correlation between screen time and mental and physical harm in an individual's development. The positive or negative health effects of screen time are influenced by the level of exposure. These can have an impact on both physical and mental well-being.



24. **Physical Health Effects.** Excessive screen time can have the following physical health effects:-

- (a) **Eye Strain (Computer Vision Syndrome).** Dry, irritated eyes, blurred vision, and headaches.
- (b) **Neck & Back Pain.** From looking down at screens ("tech neck").
- (c) **Poor Posture:** Slouching becomes the default.
- (d) **Headaches.** Often triggered by eye-strain or constant exposure to screens.
- (e) **Disrupted Body Clock.** Again, that blue light at night can throw off your circadian rhythm.
- (f) **Overeating or Mindless Snacking.** Especially when watching shows or gaming.
- (g) **Sluggishness.** Reduced physical activity leading to muscle loss and an increased risk of weight gain

25. **Mental Health Effects.** Excessive screen time can have the following mental health effects:-

- (a) **Delayed Development (In Toddlers).** Too much passive screen time can affect speech and social skills.
- (b) **Lower Academic Performance.** Happens when screen use replaces sleep, study, or physical activity.



- (c) **Addictive Behaviour.** Games and social media are designed to keep you hooked.
- (d) **Reduced Attention Span.** Constant notifications and fast-paced content can rewire your brain for shorter bursts of focus.
- (e) **Digital Burnout.** Feeling mentally exhausted or irritable after long sessions.

Balancing Screen Time

26. Maintaining an optimal level of screen time is crucial for overall wellness. Balanced screen usage can provide the following benefits:-

- (a) **Physical Health Advantages.** Increased physical activity through balanced screen time can lower the risk of obesity. Similarly, by moderating screen usage, one can improve sleep quality. Furthermore, limiting prolonged screen exposure mitigates eye strain and vision problems.
- (b) **Mental and Emotional Health Enhancements.** Modulating screen time can yield positive cognitive and emotional outcomes. Reduced screen exposure has been associated with lower levels of stress and anxiety, potentially by facilitating relaxation and calmness. Balancing screen time enhances concentration and mental focus.
- (c) **Improvements in Academic Performance.** Balancing screen time enables students to maintain focus on educational activities. It aids in students' development for effective time management strategies. Hence, it also facilitates students' ability to complete tasks efficiently.
- (d) **NCC-Specific Advantages.** Regulating screen time enables NCC cadets to dedicate more attention to physical training and other activities, thereby enhancing their endurance and agility. Decreased screen usage promotes in-personal interactions, by means of taking up tasks involving teamwork and camaraderie among NCC cadets. It allows NCC cadets to allocate more time to developing critical leadership skills, such as communication, problem-solving, and decision-making.

27. **Tips to Balance Screen Time.**

- (a) **Screen-Free Zones.** Designate screen-free zones, such as the dining room or bedrooms, to limit exposure to digital devices.
- (b) **Screen-Free Time.** Establish specific screen-free times, such as during meals, before bed, or during family activities, to promote healthier habits.
- (c) **Physical Activities.** Engage in physical activities, like sports or outdoor activities, to reduce overall screen time. Utilize monitoring applications to track and manage screen time effectively.



(d) **Hobbies.** Cultivate alternative hobbies, including reading, drawing, or playing musical instruments, as a means to decrease dependence on digital screens.



(e) **Lead by Example.** Be an active role model by monitoring your own screen time. Make for time to be active with friends and family every day.

28. Exposure to digital screens suppresses melatonin, which is responsible for regulation of sleep wake cycles. Excessive screen time among young people impacts sleep and well-being, creating a vicious cycle. These may in turn drive one to seek distraction or escapism by relying more on the screen. Therefore, it becomes mandatory to break this cycle and improve both screen habits and sleep hygiene for better mental wellness.

29. In our fast-paced society, sleep is frequently compromised. Nonetheless, upholding proper sleep hygiene, encompassing consistent sleep schedules and a conducive sleeping environment, is paramount. Sleep deprivation can result in a myriad of health issues, including obesity and mental health issues.

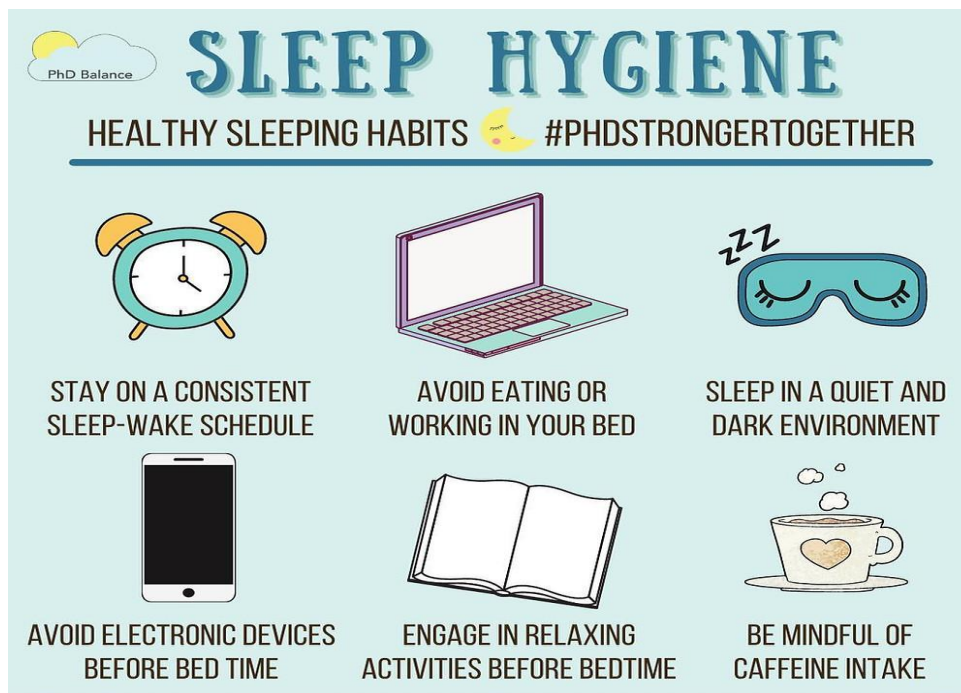
PART IV : SLEEP HYGIENE

30. **Key Components of Sleep Hygiene.** Important components of sleep hygiene are as follows:-

(a) **Environment.** Maintaining an appropriate sleep environment is crucial for quality rest. Specifically, one should ensure the bedroom remains dark, quiet, and cool/comfortable. Removing electronic devices from the sleeping space is recommended, as they can disrupt sleep patterns.

(b) **Routine.** Maintaining an optimal sleep environment is crucial for achieving quality rest. Establishing a regular sleep schedule, developing a calming pre-sleep routine, and maintaining a consistent morning routine are strategies to regulate the sleep-wake cycle effectively. schedule, developing a calming pre-sleep routine, and maintaining a consistent morning routine are strategies to regulate the sleep-wake cycle effectively. to regulate the sleep-wake cycle effectively.

(c) **Lifestyle.** Engage in regular physical exercise that promotes better sleep, but refrain from intense workouts within 2-3 hours of the designated sleep period. Abstain from consuming caffeine and nicotine in close proximity to bedtime. Complete eating at least 2-3 hours before the intended sleep time. Avoid using screen at least one hour before sleep.



31. **Factors affecting Sleep Quality.** The elements influencing sleep quality can be categorized as:-

- Environmental Factors.** Residing in a noisy neighborhood can disrupt sleep due to the presence of noise and disturbances. Change of location or weather conditions also affects sleep.
- Behavioral Factors.** Lack of exercise can cause sleep problems. Cadets may struggle to sleep due to pressure and anxiety. Using excessive coffee or tea to stay awake harms sleep quality. Overuse of screens before bed reduces sleep quality.
- Psychological Determinants.** Staying in unfamiliar living spaces like hostels or PG accommodations can induce homesickness among cadets, leading to



emotional distress and impaired sleep quality. In certain life-situations, cadets may experience social stressors and peer pressure, which can adversely impact their sleep patterns. Furthermore, academic pressures can contribute to increased anxiety and stress, further disrupting their sleep quality.

32. **Benefits of Quality Sleep.** The benefits of quality sleep are as follows:-

(a) **Physical Health Benefits.** Adequate sleep enhances physical performance. Quality sleep bolsters the immune system, reducing the risk of illnesses and infections.

(b) **Cognitive Function Benefits.** A well-rested individual can concentrate more effectively during daily tasks and can display improved alertness and focus. Sleep facilitates enhanced memory and learning, enabling individuals to retain information more readily. Quality sleep enhances critical reasoning and problem-solving skills.

(c) **Emotional Health Benefits.** Good sleep plays a crucial role in emotional wellness by stabilizing mood, reducing stress, and enhancing emotional resilience.

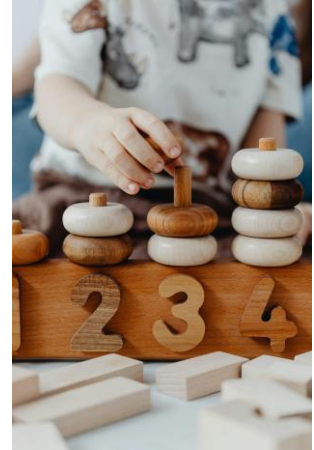
(d) **Academic Performance Benefits.** Adequate sleep enhances concentration, memory, and learning, ultimately resulting in enhanced academic performance.

33. **Strategies for Improving Sleep Quality.** Following are the guidelines for improving the sleep quality:-

(a) **Pre-Sleep Routine.** Incorporating relaxation techniques, such as deep breathing, progressive muscle relaxation, or meditation, can help calm the mind and body before sleep. Engaging in soothing activities like reading or listening to calming music can also aid in unwinding. Additionally, journaling to process thoughts, feelings, and experiences can help clear the mind prior to sleep.

(b) **Sleep-Conducive Environment.** Maintain a dark, tranquil, and comfortable sleeping environment. Investing in a supportive mattress and pillows can enhance physical comfort and facilitate better sleep.

(c) **Lifestyle Adjustments.** Engaging in regular physical activity is recommended, but strenuous exercise should be avoided within 2-3 hours of bedtime. Fueling the body with a balanced diet while limiting heavy meals close to bedtime is advised. Maintaining adequate hydration throughout the day is important, but excessive fluid intake immediately before sleep should be avoided. Limit or avoid the use of tea/coffee in daily routine.





(d) **Time Management.** Prioritize obtaining adequate sleep each night. Allocate 7-9 hours for sleep and maintain a consistent sleep schedule. Set boundaries by learning to decline nonessential activities that may disrupt your sleep. Utilize free time during the day productively by engaging in relaxing, reading, or other calming activities.

(e) **Avoid Screens Before Bed.** Avoid the use of electronic devices for at least one hour prior to the desired bedtime.

(g) **Seek Support.** Communicate your sleep-related issues with trusted peers, relatives, or an adult mentor to obtain guidance and assistance.

34. Sleep and mental wellness are deeply intertwined. Good sleep promotes emotional regulation, enhances mood stability and improves overall mental resilience. It helps the brain process emotions effectively, contributing to a more balanced and positive emotional state.

PART V : CONNECT WITH NATURE

35. **Nature and Mental Wellness.** In today's fast-paced, chaotic world, it's essential to take moments of pause and find peace. Instead of relying solely on medical treatments for issues like depression, insomnia, and anxiety, we should also look to nature too for healing and relaxation. Engaging with natural environments reduces stress, enhances mood, and boosts cognitive function, promoting emotional resilience. This text explores the benefits and suggests practical ways to incorporate nature into their daily routines for better mental health.

36. **How to Connect with Nature.** Connecting with nature serves as a powerful means for individuals to restore inner calm. It can be accomplished through a tranquil walk beneath leafy trees, listening to the gentle songs of morning birds, or noticing the breeze as it brushes past. These quiet enriching encounters help ground a person in the present. Nature's rhythm encourages a slower pace, offering clarity and emotional balance along the way.

Benefits of Connecting with Nature

37. **Reduces Stress and Anxiety.** A strong connection to nature leads to improved mood and lower anxiety, with benefits even from simple interactions like spending time in parks or watching nature documentaries. Spending 20-30 minutes in nature lowers cortisol, reducing stress and promoting relaxation. Nature provides a mental break, helping people disengage from daily pressures and motivating mindfulness through activities like walking or listening to natural sounds.



38. **Improving Mood and Happiness.** Exposure to nature increases serotonin levels, improving mood and fostering joy and creativity. Studies show that people who regularly



connect with nature feel happier and more fulfilled, making nature an essential component of emotional wellness.

39. **Boosting Attention and Memory.** Nature helps restore mental clarity by reducing cognitive fatigue. Exposure to nature improves focus and memory, benefiting individuals with any sort of stress. Outdoor activities also enhance cognitive function and performance.

40. **Cultivating Awe and Connection.** Connecting with nature inspires a feeling of wonder and a sense of being interconnected such that it encourages empathy and a deeper connection to both people and the environment. This experience promotes prosocial behaviors and a desire to protect nature.

41. **Physical Activity in Nature.** Exercising outdoors amplifies nature's mental health benefits. Physical activity in natural settings reduces stress and improves mood and sleep. For those struggling with anxiety and depression, outdoor exercise in nature provides additional therapeutic effects.

42. **Psychological and Physiological Benefits.** Nature helps reduce stress and improve mood by activating the parasympathetic nervous system and boosting serotonin. It also enhances mindfulness, reduces rumination, and strengthens the immune system, promoting overall well-being.

43. Nature's positive impact on mental wellness is undeniable. It reduces stress, improves mood, and enhances cognitive function. We can easily incorporate nature into our routines through parks, outdoor activities, and nature-based experiences, improving mental health and a flourishing mind.

HIGHER ORDER THINKING SKILLS (HOTS)

- **Analysis Exercise. Ask your friends to reflect on their daily screen time and discuss the various ways to balance screen time with their benefits.**

CONCLUSION

44. Emotional and mental wellness are crucial for leading a balanced and fulfilling life. Various factors, including biological, psychological, and social elements, shape our emotional well-being. In today's digital age, managing screen time, maintaining real-life connections, and practicing self-awareness are essential for good mental health. By adopting healthy habits such as proper sleep, stress management, and emotional regulation, individuals can improve their resilience and overall quality of life. Prioritizing emotional wellness not only enhances personal well-being but also strengthens relationships and social interactions.



SUMMARY

- Emotional and mental wellness are essential for a balanced life.
- Factors like biology, psychology, and social environment influence emotional health.
- Practicing self-awareness helps in regulating emotions effectively.
- Excessive screen time can negatively affect mental well-being.
- Real-life friendships contribute more to emotional wellness than virtual ones.
- Good sleep hygiene and stress management improve mental health.
- Building resilience through healthy habits leads to overall well-being

**ASSESSMENT EXERCISE**

Q1. The Latin quote "mens sana in corpore sano" emphasizes:

- (a) The importance of physical exercise for intelligence.
- (b) The separation of mental and physical health.
- (c) The interconnectedness of physical and mental well-being.
- (d) The superiority of mental wellness over physical fitness.

Q2. Which of the following is NOT directly mentioned as being determined by mental wellness in cadets?

- (a) Determination
- (b) Will power
- (c) Financial stability
- (d) Decision making

Q3. According to the text, real-life friendships offer:

- (a) More networking opportunities.
- (b) Deeper and more meaningful support than virtual ones.
- (c) A greater number of acquaintances.
- (d) Less emotional complexity.

Q4. Excessive screen time can particularly disrupt which of the following?

- (a) Physical strength
- (b) Sleep
- (c) Social skills in real-life settings
- (d) Nutritional habits

Q5. Which of the following is considered the foundational element of overall wellness?

- (a) Physical wellness
- (b) Social wellness
- (c) Mental wellness



- (d) Occupational wellness

Q6. Which of the following factors influencing mental wellness is most related to inherited traits?

- (a) Social Environment
- (b) Biological Factors
- (c) Work-Life Balance
- (d) Psychological Factors

Q7. Which of the following is a sign of mental distress?

- (a) Increased interest in recreational activities
- (b) Consistent eye contact and interaction
- (c) Aversion to physical affection
- (d) Showing remorse for unwarranted behaviour

Q8. Self-introspection primarily helps individuals to:-

- (a) Predict future events accurately.
- (b) Understand the reasons behind their responses.
- (c) Suppress emotional reactions.
- (d) Avoid all forms of conflict.

Q9. Which of the following is NOT listed as a direct benefit of mental wellness?

- (a) Better Stress Management
- (b) Increased financial wealth
- (c) Stronger Relationships
- (d) Boosted Self-Esteem

Q10. In the case study, what was the primary trigger for Smarty's mental distress?

- (a) Physical injury from sports
- (b) A misunderstanding leading to a drop in social media followers
- (c) Academic failure in college
- (d) Conflict with his best friend



Q11. What did ANO Keen-Eye remind Smarty about during their conversation?

- (a) The importance of chasing fame and recognition
- (b) That his self-worth should not be solely derived from social media numbers
- (c) That virtual friends are more important than real ones
- (d) The need to avoid reconnecting with his original purpose

Q12. What was the title of Smarty's new content series after his bounce-back?

- (a) "The Rise to Fame"
- (b) "Fitness After Failure"
- (c) "Toxic Motivation"
- (d) "Chasing Numbers"

Q13. According to the text, what is a characteristic of real friends?

- (a) They exist only in the virtual world.
- (b) They are easy to replace.
- (c) They provide a support system during tough times.
- (d) They are always agreeable and avoid conflict.

Q14. What is the primary difference between real friends and virtual contacts according to the text?

- (a) Virtual contacts offer deeper emotional support.
- (b) Real friends provide more superficial connections.
- (c) Real friends involve personal connection, while virtual contacts often lack it.
- (d) Virtual contacts are more crucial for emotional wellness.

Q15. Mental wellness is best described as a state of:-

- (a) Constant happiness and euphoria
- (b) Complete absence of stress
- (c) Psychological and intellectual balance
- (d) Emotional detachment



Short Answer Questions

1. Define Mental wellness.
2. Name any four domains of wellness.
3. What triggered Smarty's mental distress?
4. What is the role of self-awareness in managing mental state?
5. Why are real friendships better than virtual contacts for mental health?

Long Answer Questions

1. Explain how mental wellness is interconnected with other domains of wellness.
2. Discuss the various factors affecting mental wellness.
3. Describe the techniques used to manage one's mental state.
4. Analyze the key lessons from Smarty's case study.
5. Compare and contrast real friendships with virtual contacts. How do they impact mental well-being?

**PHYSICAL AND MENTAL WELLNESS (JD/JW)****CHAPTER PMW VII : STRESS MANAGEMENT**

"Feelings are much like waves. We can't stop them from coming, but we can choose which ones to surf."

**TEACHING INSTRUCTIONS**

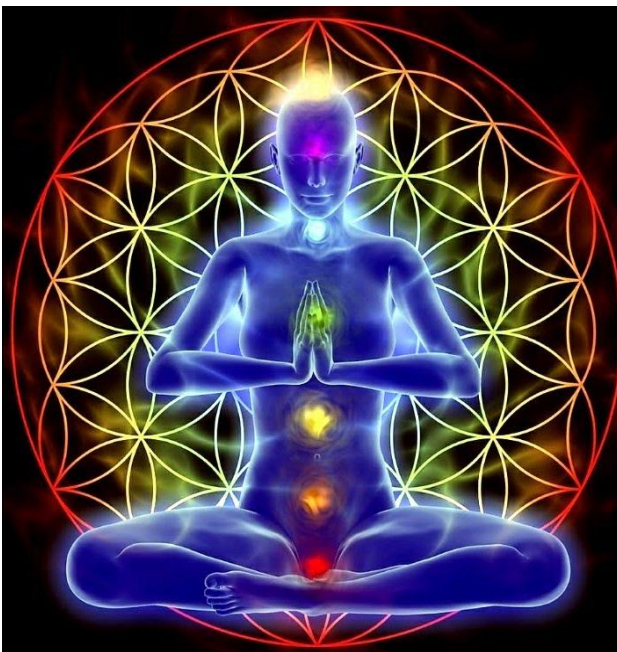
Period : **Two (02)**
Type : **Lecture and Practice**
Year : **2nd Year JD/JW**
Conducting Officer : **Associate NCC Officer**
Training Aids : **Script/Lesson Plan: OHP, Screen, Pointer Staff, Presentation, Charts/Posters.**

- Introduction : 03 Mins
- Part I : 10 Mins
- Part II : 12 Mins
- Part III : 15 Mins
- Part IV : 15 Mins
- Part V : 20 Mins
- Conclusion : 05 Mins



INTRODUCTION

1. Stress is a natural response to life's pressures, but how we manage it can determine its impact on our mental and physical health. In this lesson, we will explore stress management techniques, the importance of emotional awareness, and the benefits of meditation for stress relief.
2. Stress can be managed by number of techniques including mindfulness to cultivate the ability to recognise our thoughts and senses without bias or attachment. For cadets, it is the equilibrium between academic tasks and personal life pursuits.



PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Understanding Stress
- (b) Part II : Stress Management
- (c) Part III : Meditation & Mindfulness
- (d) Part IV : Positive Thinking
- (e) Part V : Affirmations -The Power Within

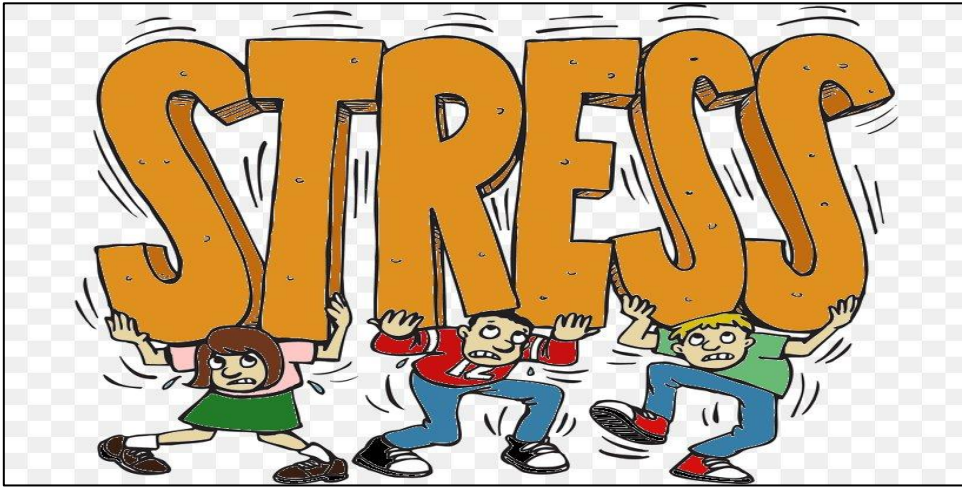
LEARNING OBJECTIVES

- Understand the causes, effects, and types of stress
- Explore various stress management techniques
- Recognize emotions and feelings to manage stress effectively.
- Understand the connection between spirituality, social wellness, and stress management
- Practice meditation, mindfulness, and work-life balance techniques to reduce stress.

INTERESTING FACTS

- Chronic Stress can contribute premature aging and wrinkles.
- Taking breaks boosts productivity by recharging brain and thereby improving focus.
- Laughter reduces Stress by lowering cortisol levels and boosting one's mood.

PART-I: UNDERSTANDING STRESS



3. **Stress**. Stress is a normal emotional and physiological response to a situation that makes you feel overwhelmed, anxious, or pressured. It's like a warning signal that alerts your body to prepare for action. It reflects a normal state of mind. Stress is not always bad as a little amount of it is required for a better performance.

4. If one imagines body as a rubber band and stretches it a little, it will retract back. This is analogous to small challenges but if one stretches it too much, it might break or stay stretched out. That's what happens with too much stress.

5. **Eustress**. It refers to positive stress that proves to be beneficial as it motivates an individual, helps one improve performance, and creates a sense of excitement. It's all about how we perceive a stressor! If we perceive it as a challenge than a threat, distress becomes eustress.

Types of Stress

6. Depending upon the duration of stress, there can be different types of stress which are as follows:-

(a) **Acute stress**. It is a **short term stress**, like before a presentation or before speaking on stage.

(b) **Episodic acute stress**. It is when one has frequent acute stress from some **constant worry or pressure**.

(c) **Chronic stress**. It is a **long-term stress, due to accumulated factors** such as problems related to financial difficulties or relationship issues. Chronic Stress is most damaging to health.



External Factors of Stress

7. Understanding the root causes of stress is essential for managing and mitigating its effects. The causes of stress can be broadly categorized into external and internal factors. External stressors come from outside influences, including life events and environmental conditions that challenge an individual's ability to cope. **Types of External factors** are given in succeeding paragraphs.

8. **Academics Related Stress.**

- (a) High workload and tight submission deadlines
- (b) Fear of failure/not doing well in competitions/exams
- (c) Interpersonal conflicts at school, and poor management
- (d) Mental burnout from excessive responsibilities
- (e) Physically demanding training/routine resulting in fatigue

9. **Financial Pressure.**

- (a) Struggling to meet basic financial needs
- (b) Debt and economic instability
- (c) Unexpected expenses and emergencies

10. **Relationship Challenges.**

- (a) Conflicts with family, friends, or partners
- (b) Lack of emotional support
- (c) Separation from, or loss of, a loved one

11. **Major Life Events.**

- (a) Separation of parents
- (b) Anxiety of relocating to a new place/surroundings
- (c) Pressure of leaving studies or getting Married
- (d) Struggle in recovery from an Injury/disease

12. **Environmental and Social Factors.**

- (a) Noise, pollution, and crowded spaces
- (b) Discrimination, social injustice, and bullying
- (c) Global crises such as pandemics or wars



Internal Factors for Stress

13. Internal stressors arise from personal thoughts, emotions, and behaviours that contribute to stress. **Types of Internal factors** are given in succeeding paragraphs.

14. **Negative Thought Patterns.**

- (a) Overthinking and excessive worrying
- (b) Low self-esteem and self-doubt
- (c) Fear of failure and perfectionism
- (d) Battling misplaced feelings of 'inadequacies/worthlessness'

15. **Unrealistic Expectations.**

- (a) Pressuring oneself to meet high standards
- (b) Comparing oneself to others
- (c) Feeling responsible for everything

16. **Health Concerns and Emotional/Psychological Triggers.**

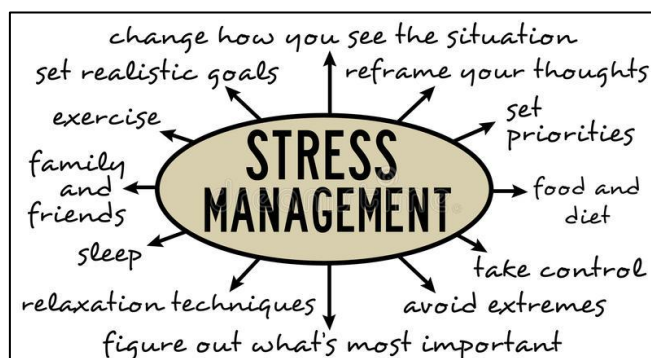
- (a) Chronic illness or injury
- (b) Lack of sleep and poor nutrition
- (c) Substance abuse and unhealthy coping mechanisms
- (d) Suppressing emotions rather than addressing them
- (e) Anxiety and depression
- (f) Difficulty adapting to change

Signs of Stress

17. Recognising the signs of stress can help you take timely action to manage it. Various symptoms of stress are as follows:

- (a) Feeling anxious, worried, or overwhelmed
- (b) Difficulty sleeping or concentrating
- (c) Physical symptoms like headaches, stomach aches, or muscle tension
- (d) Irritability, mood swings, or emotional outbursts
- (e) Avoiding activities or situations that trigger stress

PART-II: STRESS MANAGEMENT



Stress Management Techniques

18. As an NCC student, it's essential to develop healthy coping mechanisms to manage stress. The stress management techniques are as follows:-

Cognitive Techniques

- **Reframing.** Changing your perspective on a stressful situation. For example, seeing a challenging situation as an opportunity to grow rather than a threat.
- **Positive Self-Talk.** Substituting negative thoughts with positive affirmations.

Physical Techniques

- **Exercise.** Exercise releases endorphins, lowering stress and enhancing happiness.
- **Deep Breathing.** The breathing method also known as the 4-7-8 method (inhale for 4 seconds, hold for 7, exhale for 8) reduces tension.
- **Progressive Muscle Relaxation (PMR).** Physical stress is released by tensing and relaxing muscles.

Time Management

- **Prioritising tasks and breaking them down into smaller, manageable steps to avoid feeling overwhelmed.**

Social Techniques

- **Connect with friends, family or a trusted adult to share your concerns and feelings.**

Self-Care

Make time for activities that bring you joy and help you relax such as reading, listening to music, or pursuing a hobby

Thoughts, Emotions and Feelings

19. **Thoughts.** Thoughts are the mental processes that involve reasoning, analyzing, remembering, or considering something. They are often conscious and can be either positive or negative.

- (a) **Origin** They originate from the brain's cognitive processes and can be influenced by external events, past experiences, or current situations.
- (b) **Example** "I think I should start exercising more."

20. **Emotions.** Emotions are intense, automatic responses to stimuli, often involving a physiological reaction (like a racing heart or sweating) and an immediate mental reaction. They tend to be short-lived and are generally more instinctual.

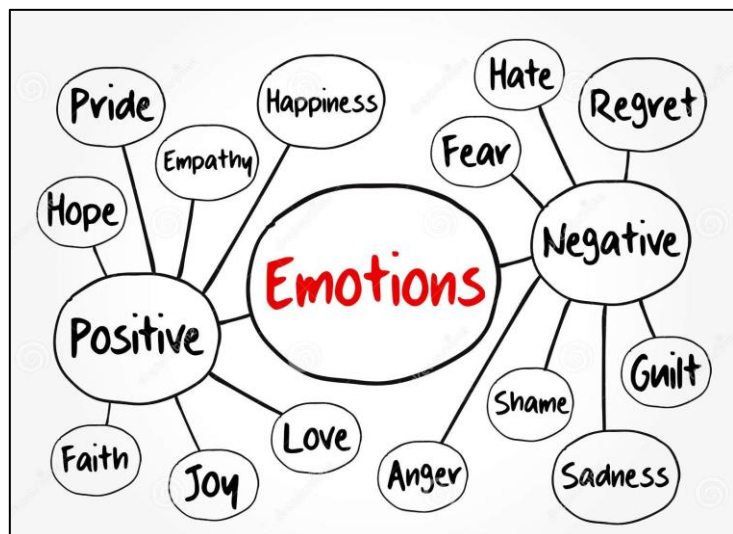
- (a) **Origin.** Emotions arise from deep-seated, primal brain centers (like the limbic system), triggered by thoughts, external events, or physiological states.
- (b) **Example.** "I was angry when my car was hit in the morning."

21. **Feelings.** Feelings are the union of thoughts and emotions. Feelings are more prolonged and are the subjective experience of emotions. They are how we interpret and make sense of our emotions. Both emotional experiences like comfort, fear, or happiness as well as bodily sensations like pain, warmth, or cold can be referred to as feelings.

- (a) **Origin.** Feelings are based on our emotional responses but are processed through our thoughts and personal understanding of the emotion.
- (b) **Example.** "I am still angry over the ill-mannered and disrespectful behaviour of the driver."

22. **Difference between Emotions and Feelings.** Emotions, e.g. anger, are an internal response triggered by an event (may be a perceived threat, injustice etc).

How we interpret and perceive that event over a period of time, becomes a feeling. While **emotions are often more instinctive, feelings are how we reflect on those emotions over time, infusing them with thought and giving them energy.** Since **stress is caused by feelings,** recognizing and separating them from emotions (the immediate reaction), can help us see how we are carrying their load internally & tackle them better, thereby reducing stress.





Dealing with 'Stressful Feelings' (Lingering Negative Emotions)

23. Tackling stressful feelings can be challenging, but it's entirely possible with the right approach. The goal is not to repress the emotions but to **experience** and **release** them in a way that doesn't hold you back or negatively impact your well-being. Here are some effective strategies to move past stressful feelings and free yourself from their grip:-

24. **Acknowledge and Accept the Emotion.** The first step in managing negative emotions is acknowledging them. Denying or suppressing emotions only makes them stronger over time. Acceptance doesn't mean you approve of the emotion, but rather that you give yourself permission to feel it without judgment.

25. **Mindfulness and Self-Awareness.** Mindfulness allows you to be present with the emotion and observe it without getting caught up in it. This practice helps you distance yourself from the emotion, reducing its power over you. Practice mindful breathing, paying attention to your breath as you inhale and exhale.

26. **Journaling.** Writing can be a therapeutic way to process your emotions. When you write down your feelings, you externalize them, which helps you gain perspective and release the emotional weight.

27. **Cognitive Reframing.** It is the practice of changing the way you perceive a situation in order to alter your emotional response to it. By viewing things from a different angle, you can reduce the intensity of negative emotions. Challenge the negative thought patterns that accompany your emotions. Ask yourself questions like, "Is this thought accurate?" or "Can I look at this from another perspective?"

28. **Engage in Physical Activity.** Exercise helps release **endorphins**, the brain's natural mood boosters, and can alleviate the physical tension that often accompanies negative emotions. Moving your body also helps you process lasting emotions and release pent-up energy.

29. **Practice Self-Compassion.** Negative emotions often stem from over self-criticism or harsh judgment. Being kind to yourself, especially when you're experiencing difficult emotions, helps reduce the intensity of those emotions and promotes healing. When you're struggling with negative emotions, treat yourself as you would a close friend. Offer words of encouragement, understanding, and reassurance.

30. **Letting Go Through Release Techniques.** Sometimes, the best way to release lingering negative emotions is through physical or emotional release techniques. This could be crying to release the pent-up feelings, using art to express how you feel (painting, dancing, writing a letter you never send) or even yelling into a pillow.

31. **Seek Support.** Talking about lingering emotions with someone you trust can provide clarity, relief, and support. Sharing your feelings with others can help you process them more effectively. Talk to someone you are close to or to your institution's ANO.

32. **Forgiveness.** Holding on to resentment or anger toward others or yourself can keep negative emotions lingering. **Forgiveness isn't about excusing bad behaviour but about freeing yourself from the grip of those emotions.** If someone hurt you, rather than ruminating on the injustice, remind yourself that forgiveness is a tool for **your healing**, not theirs.

DID YOU KNOW?

The 5-4-3-2-1 Grounding Technique to Reduce Stress

The 5-4-3-2-1 grounding technique is a simple yet powerful tool to help calm your mind, reduce stress and anxiety, and bring yourself back to the present moment.

Here's how it works:

The Technique

- **5:** Notice 5 things you can see around you, such as a chair, a book, or a picture.
- **4:** Acknowledge 4 things you can touch or feel, like your feet on the ground, the chair beneath you, or the air on your skin.
- **3:** Identify 3 things you can hear, such as a clock ticking, a bird chirping, or the hum of a machine.
- **2:** Recognise 2 things you can smell, like a scented candle, fresh air, or a fragrant flower.
- **1:** Focus on taking 1 deep breath and feeling the air flow in and out of your body.

Social Support

33. **Social Support.** Social support refers to the interconnectedness and positive relationships we have with others in our community and the world around us. It encompasses our ability to build and maintain healthy relationships, communicate effectively, show empathy and compassion, and contribute positively to society.



34. **Key Aspects of Social Support.** Key aspects of social support are as follows:-

(a) **Quality of Relationships.** One key aspect of social support is the quality of our relationships with family, friends, colleagues, and acquaintances. Strong, supportive relationships offer belonging, emotional support, and a support network in times of need, that boosts our happiness and well-being.



(b) **Communication.** Clear and open communication helps development of understanding, trust, and mutual respect in relationships. It allows us to express our thoughts and feelings honestly, listen actively to others, and resolve conflicts in a constructive manner.



(c) **Empathy and Sympathy.** Empathy and sympathy are fundamental qualities that underpin social support. Empathy involves the ability to understand and share the feelings of others, while sympathy involves showing kindness, compassion and concern for others' well-being. These qualities enable us to connect with others on a deeper level, offer support and encouragement, and promotes a sense of unity and solidarity within our communities. By practicing empathy and sympathy in our interactions, we can create a caring society where individuals feel valued, understood, and supported.



35. **Positive Implications of Social Support.** Social support promotes positive changes in leading a good, healthy life and leads towards achieving fulfilment in life. It leads to better relations, good communication skills, enhanced confidence, and hence, affects one's mental wellness positively.

PART III: MEDITATION & MINDFULNESS

Meditation & Practice

36. **Meditation.** Meditation is a powerful concentration technique that helps calm your mind, relax your body, and focus your attention.

37. **Focused Breath-work and Meditation.** Breathing techniques like pranayama help regulate the body's energy by calming the nervous system and supporting healing for reducing stress.



38. **Benefits of Meditation.** Benefits of meditation accrued are as under:
- (a) Physical Benefits.
 - (b) Emotional Benefits.
 - (c) Cognitive Benefits.
39. **Physical Benefits.** The physical benefits of meditation are as follows:
- (a) **Reduces Stress and Anxiety.** Meditation helps calm the mind and body, reducing stress hormones like cortisol.
 - (b) **Improves Sleep.** Regular meditation can help students get better sleep, leading to improved physical and mental health.
 - (c) **Boosts Immune System.** Meditation has been shown to strengthen the immune system by reducing inflammation and increasing antibody production.
 - (d) **Reduces Chronic Pain.** Meditation can help reduce chronic pain by increasing the brain's pain tolerance and decreasing emotional reactivity.
40. **Emotional Benefits.** The emotional benefits of meditation are as follows:
- (a) **Increases Emotional Regulation.** Meditation improves students' emotional intelligence and well-being.
 - (b) **Enhances Self-Awareness.** Students gain self-awareness and understand their actions through regular meditation.
 - (c) **Develops Resilience.** Meditation helps students develop resilience, enabling them to better cope with challenges and setbacks.
 - (d) **Improves Relationships.** By increasing empathy and understanding, meditation can help students build stronger, more positive relationships.
41. **Cognitive Benefits.** The cognitive benefits of meditation are as follows:
- (a) **Improves Focus and Concentration.** Meditation improves attention and focus, enabling students to perform better academically and in co-curricular activities.
 - (b) **Enhances Problem-Solving Skills.** Regular meditation practice can improve problem-solving skills, creativity, and critical thinking.
 - (c) **Boosts Memory and Learning.** Meditation enhances memory, learning, and academic achievement.
 - (d) **Increases Grey Matter.** Meditation boosts grey matter in attention, emotion regulation, and memory areas.



42. **Practical Applications of Meditation.**

(a) **Before Major Events or Competitions.**

- (i) **Pre-Training Meditation.** Practice meditation before training events/competitions to improve focus, concentration, and mental clarity.
- (ii) **Event Preparation.** Meditate before events like drills, parades, or camps to reduce anxiety and boost confidence.

(b) **During Academic Studies.**

- (i) **Study Breaks.** Take short meditation breaks during study sessions to refresh your mind and improve retention.
- (ii) **Exam Preparation.** Practice meditation before exams to reduce stress, improve focus, and enhance performance.

(c) **For Personal Development.**

- (i) **Daily Routine.** Practice meditation everyday to develop self-awareness, mental discipline, and emotional management.
- (ii) **Goal Setting.** Meditate on your goals and aspirations to clarify your thoughts, boost motivation, and develop a positive mindset.

(d) **For Team Building and Leadership.**

- (i) **Team Meditation.** Practice meditation with your team to improve communication, build trust, and enhance teamwork.
- (ii) **Leadership Development.** Meditate on leadership qualities like discipline, responsibility, and decision-making to develop your leadership skills.

43. **Simple Meditation Techniques.** Some of the simple meditation techniques every student must practice and spread awareness of are as follows:

- (a) **Deep Breathing.** Focus on slow, deep breathing to calm your mind and body. **You may like to concentrate on your breath, as it is an actual action always happening in the 'present'.** This can be done either with closed eyes or by keeping them partially open and concentrating on the tip of the nose.
- (b) **Mindful Walking.** Pay attention to your walking, noticing the sensation of your feet touching the ground, the movement of your legs, and the rhythm of your breath.



ACTIVITY

- ANO to make cadets sit/stand and practise a 'mind-calming' drill. Suggested routine is as under:-
 - **Stand or sit with** spine straight, shoulders relaxed.
 - **Close your eyes** gently and bring your focus to your breath.
 - **Inhale slowly through the nose** (count 1...2...3).
 - **Hold** the breath gently (count 1...2).
 - **Exhale slowly through the mouth** (count 1...2...3...4).
 - With each breath, mentally say:
 - Inhale: "*I am focused.*"
 - Exhale: "*I am calm.*"
- Repeat this cycle for **5 deep breaths**, staying in the 'present' moment.

Mindfulness

44. **Mindfulness**. Mindfulness involves becoming aware of one's thoughts rather than focussing on nothingness. Seeing thoughts arise, dwell, and fade helps one accept and move on. Unlike putting thoughts away, we may see and comprehend others better when we are mindful.

45. **Beginning to Practice Mindfulness**. To move towards mindfulness, it is suggested to begin gradually as follows:-

- (a) As a beginner, one should set some time aside when they feel relatively calm.
- (b) One can do this at home or when out for a walk. When one is ready, they should begin by observing the present moment as it is, without judgement or desire to change what is.
- (c) One should notice how their thoughts come and go and pull themselves back into the present if the mind starts to wander.

46. **Developing Mindfulness as a Habit**. The best part of mindfulness is its portability. Whether one misses a bus or is in the locker room before a major game, mindfulness can help. Finding a tranquil place to start helps one stay present. Once one is comfortable with mindful-thinking basics, one can slowly apply them wherever they are.



47. **Benefits of Mindfulness.** Mindfulness and its effects on mind and body are immense and are still being studied. If cadets are mindful of their actions, they stay mentally fit with an alert mind, amazing focus, better sleep, mindful eating, better relations, reduced stress, and a great sense of happiness.

48. Finding a student work-life balance can be challenging but it is possible with the right tools. You can succeed both academically and personally by defining priorities, managing time, caring for yourself, setting boundaries, leveraging resources, finding support, and being adaptable. All of this and more can easily be accomplished if one is mindful of how one plans the work and then workout the plan.

PART IV : POSITIVE THINKING

49. **The Power of Positive Thinking.** Positive thinking is more than just maintaining a cheerful attitude; it is a mindset that influences mental, emotional, and even physical well-being. By fostering an optimistic outlook, individuals can improve resilience, reduce stress, and enhance overall life satisfaction.

Importance of Positive Thinking

50. A positive mindset can transform the way we approach challenges and setbacks. **When we approach stressful situations with a positive mindset, we are less likely to become overwhelmed by them.** Positive thinking encourages us to see challenges as opportunities for growth or learning, as opposed to a heavy burden, causing stress. Gains from cultivating positive thinking are given in succeeding paragraphs.

51. **Enhances Mental Health.**

- (a) Reduces stress and anxiety
- (b) Lowers the risk of depression
- (c) Improves emotional regulation and resilience



52. **Boosts Physical Well-being.**

- (a) Strengthens the immune system
- (b) Lowers blood pressure and reduces the risk of heart disease
- (c) Promotes better sleep and overall energy levels

53. **Improves Relationships and Social Life.**

- (a) Encourages healthier communication and emotional intelligence
- (b) Fosters stronger personal and professional relationships
- (c) Helps in conflict resolution and emotional support

54. **Increases Productivity and Success.**

- (a) Enhances problem-solving skills
- (b) Boosts motivation and perseverance
- (c) Helps in achieving personal and professional goals

How to Cultivate Positive Thinking

55. Developing a positive mindset takes practice and intentional effort. Here are some effective strategies.

56. **Practice Gratitude.**

- (a) Keep a gratitude journal to note daily positive experiences
- (b) Express appreciation to others regularly
- (c) Focus on what you have rather than what you lack

57. **Reframe Negative Thoughts.**

- (a) Challenge negative self-talk with constructive alternatives
- (b) Look for lessons in setbacks rather than dwelling on failure
- (c) Shift focus from problems to potential solutions

58. **Surround Yourself with Positivity.**

- (a) Engage with optimistic and supportive people
- (b) Consume uplifting books, music, and media
- (c) Minimize exposure to negativity and pessimism



59. **Practice Mindfulness and Disciplined Self-Care.**

- (a) Engage in meditation or deep breathing exercises
- (b) Prioritize sleep, healthy eating, and physical activity
- (c) Take breaks and manage stress through relaxation techniques

60. **Set Realistic Goals and Celebrate Progress.**

- (a) Break large goals into smaller, achievable steps
- (b) Recognize and celebrate personal achievements
- (c) Stay patient and acknowledge growth over time

61. Positive thinking **cultivates** an optimistic mindset and lays the foundation for deeper mental practices. Building on this base, affirmations serve as an equally important and more focused tool, offering a conscious way to reshape thoughts and effectively manage stress.

PART V : AFFIRMATIONS-THE POWER WITHIN

Affirmations

62. Affirmations are uplifting and empowering phrases that individuals repeat to themselves to foster self-confidence, reinforce positive thinking, and develop a constructive mindset. **Affirmations are centred on the idea that one's thoughts and beliefs create one's reality.** The concept of Affirmations is also frequently referred as the 'Law of Attraction'.



Scientific Explanation of Affirmations/Law of Attraction

63. **The Quantum Field and Consciousness.** In quantum theory, everything is made up of **energy and vibration**—including thoughts and feelings. Though it is not a 'settled science' yet, it is believed that in the quantum field, all potential realities exist. So for each of our 'failed' endeavour, a version of reality exists where it's already fulfilled. For every negative outcome, a positive one also exists at the same time. Whenever we set an 'intention' firmly, we are aligning with and 'attracting' those positive possibilities, among many potential outcomes.

64. Our heart is more than just an organ—it's a powerful energy center, said to be far stronger (100 times electrically and 5000 times magnetically) than the brain. Though emotions are processed in the brain, we often *feel* them in the heart due to its strong link to physical sensations like a racing pulse or chest tightness. The heart's **electromagnetic signal, more powerful than the brain's**, can influence the body and potentially interact



with the environment in subtle ways. Emotions like gratitude, love, or joy **create coherent heart rhythms**, which studies show, puts us "in sync" with desired outcomes.

65. **Feeling, as the union of thought and emotion, carries the strongest vibration.** While the brain imagines and visualizes, it's the heart that brings these visions to life through feelings. True shift in our reality comes from '*feeling from the outcome*' as if has already happened, and being genuinely grateful for it. This is what sends powerful waves into the universal field and 'draws/attracts' the outcome to us.

How to Wish/Affirm

66. **Feeling is the Secret.** The emotional charge behind an affirmation is what gives it true power. Without genuine feeling, thinking or repetition alone has little effect. Feeling is the fuel that activates transformation. **The universe responds not to what we say we want, but to what we're energetically aligned with.**

67. **Law of Assumption.** According to the **Law of Assumption**, embodying the feeling of your desire already fulfilled attracts its manifestation. It means that you should mentally and emotionally live as though your desired outcome has already come true. **Be enveloped in that 'assumed reality'**, with every little detail thrown in.

68. **Example.** For a cadet wanting to excel in studies, one must 'feel the desired reality' from the end-state. Such an affirmation could be, ***"Having mastered my syllabus with ease and clarity, I consistently studied 3 focused hours a day, and it has paid off — I have scored 90% in my exams! My family, my teachers and my friends are feeling proud of me. I am feeling extremely thankful, motivated, confident, and completely aligned with my highest potential."***

How do Affirmations Help in Stress Management?

69. **Creating a Sense of Control.** In being able to 'attract' a desired outcome, positive Affirmations place individuals in a position of initiative, and promote a shift in mindset, from being 'a victim of circumstances', to someone with a sense of fair degree of control over one's life, fostering a sense of empowerment.

70. **Shifting from Negative to Positive Thinking.** Many individuals experience negative self-talk. Affirmations guide the mind to shift focus from problems to possibilities, encouraging a solution-oriented mindset.

71. **Enhancing Relaxation.** Affirmations centered on peace, calm, and present-moment awareness can activate the body's relaxation response. This helps alleviate physical symptoms of stress such as muscle tension and shallow breathing.

72. **Boosting Self-Esteem.** By reinforcing a sense of self-worth, affirmations empower individuals to believe in their ability to handle challenges. This internal strength provides a buffer against stress.



73. **Mindfulness and Focus.** The repetitive nature of affirmations helps anchor attention in the present. This mindfulness practice prevents the mind from drifting into worry, reducing overall stress levels.

CONCLUSION

74. **Mindfulness** helps us feel better by changing how we think, feel, and see the world. It supports a healthy balance between work and personal life, letting us enjoy time with family, friends, and hobbies. In today's busy world, practicing **meditation daily** can help us stay calm and emotionally balanced.

75. **Managing stress** is important for staying mentally healthy. Some helpful ways include **relaxation, time management, meditation,** and **positive thinking.**

76. Using **positive affirmations**—repeating encouraging thoughts—can boost confidence and help us stay focused and calm during tough times. They build emotional strength and help us handle stress more clearly and positively.

SUMMARY

- Stress management is key to sustaining mental health. Effective methods of stress management include relaxation techniques, time management, meditation and thinking & affirming positively.
- Mindfulness affects our sense of well-being via how we think, feel, talk to ourselves, and view the world. It shapes our emotional and mental health by influencing self-perception and outlook.
- In today's fast-paced and stressful world, incorporating meditation into our daily routine can be a powerful tool for maintaining mental and emotional balance. Meditation helps maintain calm and resilience in a demanding environment.
- Positive mindset created through strong affirmations is a simple yet powerful practice that can transform the way we think, feel, and respond to stress. Affirmations reinforce confidence, focus, and emotional strength.
- By nurturing positive thoughts, fostering self-belief, and grounding us in the present moment, affirmations help build emotional strength, promote calm, and empower us to navigate challenges with clarity and confidence. Positive thinking enhances clarity, calmness, and resilience.

**ASSESSMENT EXERCISE****Multiple Choice Questions (MCQs)**

Q1. Which aspect of well-being is directly influenced by mindfulness according to the text?

- (a) Financial stability
- (b) Social reputation
- (c) Physical fitness
- (d) How we think, feel, and view the world

Q2. A strong work-life balance primarily helps individuals to:-

- (a) Work overtime with less fatigue
- (b) Ignore social distractions
- (c) Balance personal and professional satisfaction
- (d) Reduce physical workload

Q3. Incorporating meditation daily is considered a tool for:-

- (a) Avoiding reality
- (b) Enhancing financial decision-making
- (c) Maintaining mental and emotional balance
- (d) Boosting physical strength

Q4. The text implies mindfulness helps most by:-

- (a) Removing stress entirely
- (b) Preventing emotional attachment
- (c) Altering our internal dialogue and perception
- (d) Encouraging complete solitude

Q5. Which method is *not* mentioned as an effective stress management technique?

- (a) Journaling
- (b) Positive affirmations
- (c) Time management
- (d) Meditation

Q6. Why is managing stress considered essential in the text?

- (a) It helps in career promotions
- (b) It supports mental wellness and overall well-being
- (c) It prevents all illnesses
- (d) It leads to higher income

Q7. Positive affirmations impact stress by:-

- (a) Encouraging denial



- (b) Reinforcing negative patterns
- (c) Isolating emotions
- (d) Building self-belief and promoting calm

Q8. Which of these best describes the benefit of grounding oneself in the present?

- (a) It boosts memory recall
- (b) It enables future planning
- (c) It reduces distraction and enhances calm
- (d) It leads to perfectionism

Q9. According to the document, meditation helps in:-

- (a) Avoiding challenges
- (b) Escaping responsibilities
- (c) Maintaining balance amidst a stressful world
- (d) Ignoring emotions

Q10. Time management is considered effective for stress management because it:-

- (a) Removes time-bound goals
- (b) Avoids conflict altogether
- (c) Reduces panic through better control
- (d) Encourages procrastination

Q11. Affirmations help in all except:-

- (a) Fostering self-belief
- (b) Promoting calm
- (c) Disrupting concentration
- (d) Building emotional strength

Q12. A positive mindset assists in stress management by:-

- (a) Suppressing emotions
- (b) Encouraging negative thinking
- (c) Shaping responses with confidence and clarity
- (d) Avoiding critical reflection

Q13. The phrase “thinking & affirming positively” refers to:-

- (a) Daydreaming
- (b) Emotionally detaching



- (c) Repeating optimistic thoughts to manage stress
- (d) Relying solely on instincts

Q14. Mindfulness practices promote well-being by:-

- (a) Limiting interactions with others
- (b) Enhancing awareness of thoughts and emotions
- (c) Repressing past memories
- (d) Distracting the mind

Q15. Relaxation techniques are useful in stress management because they:-

- (a) Induce laziness
- (b) Temporarily distract from problems
- (c) Replace productive work
- (d) Help the mind and body return to a calm state

Short Answer Questions

- Q1. What are some key tools mentioned for managing stress effectively?
- Q2. How does mindfulness influence our well-being?
- Q3. Why is it important to maintain a work-life balance in today's world?
- Q4. What role do affirmations play in stress management?
- Q5. What is one simple practice that helps nurture positive thinking and emotional strength?.

Long Answer Questions

- Q1. Describe the physiology of stress, explain the difference between eustress and distress, and discuss the various types of stress.
- Q2. Explain the importance of managing stress emotions, discuss techniques for doing so, and outline how to develop emotional resilience.
- Q3. Discuss the concept of spirituality, differentiate between spirituality and religion, and explain the importance of spirituality, detailing its various categories.
- Q4. Explain the concept of mindfulness, discuss its benefits for mental wellness, and describe techniques for practicing mindfulness.
- Q5. Discuss the importance of work-life balance, especially for NCC cadets, and describe effective strategies for achieving and maintaining work-life balance, including its advantages.

PHYSICAL AND MENTAL WELLNESS (JD/JW)

CHAPTER PMW VIII : DIET AND NUTRITION

“Your body is a reflection of what you consume.”



TEACHING INSTRUCTIONS

Period : One (01)
Type : Lecture and Practice
Year : 2nd Year JD/JW
Conducting Officer : Associate NCC Officer (ANO)
Training Aids : Presentation on Computer/ Chart and Script/ Lesson Plan

Time Plan

- Introduction : 02 Mins
- Part I : 17 Mins
- Part II : 18 Mins
- Conclusion : 03 Mins



INTRODUCTION

1. Nutrition plays a vital role in maintaining overall health and well-being. It refers to the process by which the body takes in and utilizes food to fuel its functions, promote growth, and repair tissues. A well-balanced dietary regimen ensures that the body receives the essential nutrients it needs while maintaining optimal energy levels and supporting immune function. By understanding the various types, functions, and sources of these nutrients, individuals can make informed dietary choices that contribute to long-term health.

2. Dietary guidelines and practical strategies are essential for planning balanced meals that ensure proper nutrition. Gaining the skills to read and interpret food labels enables individuals to make informed decisions about food choices. Effective meal planning, the adoption of healthy cooking methods, and the maintenance of nutritious eating habits are key components for sustaining a health-focused lifestyle.



LEARNING OBJECTIVES

- Understand the importance of nutrition and balanced diet.
- Understanding functions of macronutrients and micronutrients
- Develop healthy eating habits.
- Learn to incorporate meal planning and the adoption of healthy cooking methods

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Diet and Nutrition
- (b) Part II : Overview Of Dietary Guidelines

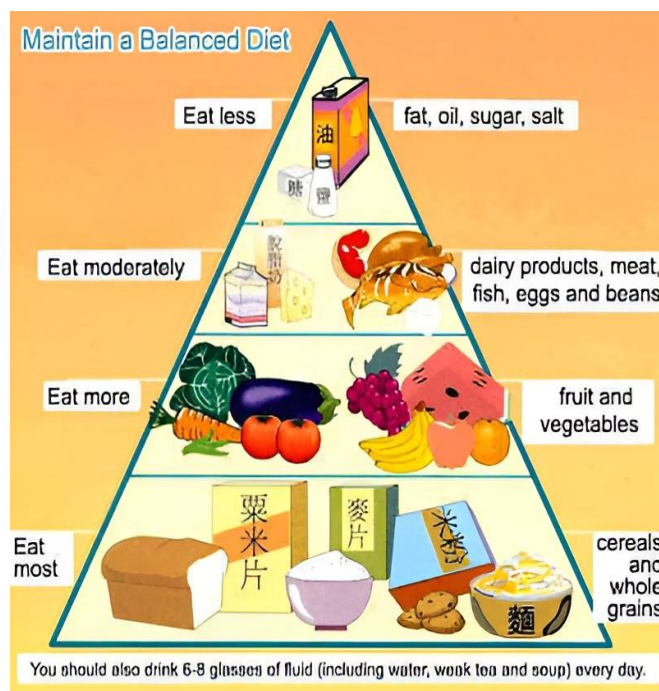
INTERESTING FACTS

- Antioxidants in fruits and vegetables and omega-3 fatty acids in fish are known to support brain health.
- Drinking enough water can boost your metabolism and increase fat-burning by up to 30% for about 30-40 minutes after consumption.
- Protein is essential for building and repairing muscles, bones, and tissues.

PART I : DIET AND NUTRITION

3. **Diet.** A diet consists of the food and drinks we consume daily. It can also refer to a specific eating plan or regimen designed for health, weight management, or medical reasons. It includes a variety of foods that provide essential nutrients—such as carbohydrates, proteins, fats, vitamins, and minerals—to support overall health and well-being.

4. **Nutrition.** It is the process by which the body takes in, absorbs, and utilizes the nutrients from food to maintain health, growth, and energy. It involves the intake of essential substances like carbohydrates, proteins, fats, vitamins, minerals, and water, which support various bodily functions, promote cell repair, and help prevent diseases. Proper nutrition is crucial for overall well-being, physical and mental performance, and disease prevention.



5. **Balanced Diet.** A balanced diet is one that includes a variety of foods from all the food groups in the right proportions to provide the necessary nutrients including arbohydrates, proteins, fats, vitamins, minerals, and water which are needed for the body to function effectively.

6. Significance of Maintaining A Well-Balanced Diet.


(a) **Provides Essential Nutrients.** Ensures the body receives the right balance of carbohydrates, proteins, fats, vitamins, minerals, and water to function properly.

(b) **Supports Immune Health.** Strengthens the immune system, helping the body fight off infections and illnesses.


(c) **Prevents Chronic Diseases.** Reduces the risk of developing conditions like heart disease, diabetes, obesity, and high blood pressure.

(d) **Promotes Growth and Repair.** Supports the growth, repair, and maintenance of cells, tissues, and organs in the body.


DID YOU KNOW?




Just **2 bananas** will provide you with enough energy for an intense 90-minute workout.



Apples are more effective in walking you up in the morning than coffee.



Eating **cucumbers** before bed time can help you wake up feeling refreshed and headache-free.



3 carrots give you energy to walk 3 miles. They were first grown as a medicine, not food.



- (e) **Boosts Energy Levels.** Helps maintain stable energy throughout the day, preventing fatigue and enhancing physical and mental performance.
- (f) **Improves Mental Health.** Contributes to better brain function, mood regulation, and cognitive abilities.
- (g) **Aids in Weight Management.** Helps in maintaining a healthy weight by regulating calorie intake and supporting metabolic processes.
- (h) **Promotes Longevity.** A well-balanced diet can increase life expectancy and improve overall quality of life.

7. **Components of a Balanced Diet.** The various types, functions, and sources of components of a balanced diet are as given: -

<u>Component</u>	<u>Function</u>	<u>Types of Component</u>	<u>Sources</u>
Carbohydrates	Provide energy for the body. Spare proteins from being used for energy, allowing them to be used for growth and repair. Aid in the functioning of the brain and nervous system.	Simple Carbohydrates (sugars that provide quick energy)	Fruits (e.g., bananas, apples), dairy (e.g., milk, yogurt), honey, and table sugar.
		Complex Carbohydrates (starches that provide sustained energy)	Whole grains (e.g., brown rice, oats, quinoa), vegetables (e.g., potatoes, sweet potatoes), legumes (e.g., beans, lentils), and whole-wheat bread.
Proteins	Build and repair tissues. Produce enzymes and hormones. Support immune function and muscle building. Provide a secondary source of energy.	Complete Proteins. These contain all nine essential amino acids (usually animal-based sources).	Meat, fish, poultry, eggs, dairy products.
		Incomplete Proteins. These lack one or more essential amino acids (usually plant-based sources).	Legumes (e.g., beans, lentils), nuts, seeds, tofu, quinoa, and whole grains.
Fats	<ul style="list-style-type: none"> • Provide long-term energy storage. • Protect organs and support cell structure. • Help absorb fat-soluble vitamins (A, D, E, and K). • Regulate hormones and help with brain function. 	Unsaturated Fats. (Healthy fats that improve heart health and support cell function)	Olive oil, avocados, nuts, Fatty fish, flaxseeds, walnuts.
		Saturated Fats. (Found in animal products and some plant oils. They can raise cholesterol)	Butter, fatty cuts of meat, coconut oil.



		levels if consumed in excess.)	
		Trans Fats. These are artificially produced fats and are considered unhealthy.	Processed foods, margarine, baked goods.
Vitamins	Vitamins are essential for various metabolic processes. They support immune function, skin health, vision, and overall growth and development.	Vitamin A	Carrots, sweet potatoes, spinach, kale.
		Vitamin C	Citrus fruits (oranges, lemons), strawberries, bell peppers, tomatoes.
		Vitamin D	Sunlight, fortified dairy, fatty fish.
		Vitamin E	Nuts, seeds, spinach, broccoli.
		Vitamin K	Leafy greens (e.g., kale, spinach), broccoli, Brussels sprouts.
Minerals	Minerals are important for maintaining bone health, nerve function, fluid balance, muscle function, and enzyme activity.	Calcium	Dairy products (e.g., milk, cheese, yogurt), leafy greens (e.g., kale, bok choy), fortified plant-based milks.
		Iron	Red meat, poultry, seafood, legumes, spinach, fortified cereals.
		Potassium	Bananas, potatoes, spinach, tomatoes, oranges.
		Magnesium	Nuts, seeds, leafy greens, whole grains.
Fiber	Fiber is important for digestive health, regulating bowel movements and lowering cholesterol levels	-	Whole grains, fruits, vegetables, legumes and seeds.
Water	Water is essential for hydration, temperature regulation, nutrient transport, and waste removal.	-	Drinking water, fruits (e.g., watermelon, oranges), vegetables (e.g., cucumbers, lettuce), and other fluids like herbal teas.

PART II : OVERVIEW OF DIETARY GUIDELINES AND MEAL PLANNING

8. Overview of Dietary Guidelines and Strategies for Balanced Meal Planning.

Dietary guidelines are designed to promote overall health, prevent chronic diseases, and maintain a healthy weight. They provide advice on the types and amounts of foods to eat for maintaining a balanced, nutrient-rich diet. Applying these guidelines through meal planning can help ensure that you're meeting your nutritional needs. Below is an overview of the key dietary guidelines and strategies to incorporate them for balanced meal planning. To achieve balanced meal for the body, following guidelines must be adhered to:-



(a) **Eat a variety of foods.** Include a variety of Foods from all food groups to ensure you get all the necessary nutrients.

(b) **Hydrate adequately.** Drink plenty of water throughout the day to stay hydrated. Include electrolyte-rich foods like bananas (potassium), dates (potassium), and coconut water (electrolytes) to help maintain electrolyte balance.

(c) **Limit processed and junk foods.** Try to limit your intake of processed and junk foods that are high in sugar, salt, and unhealthy fats.

HEALTHY FOOD	JUNK FOOD
Rich in essential nutrients, vitamins, and minerals	Generally low in nutrients, high in empty calories
Natural, whole ingredients	Often processed, high in unhealthy additives
High in fiber	Low in fiber
Low in added sugars	High in added sugars
Contains healthy fats	High in unhealthy trans fats and saturated fats

9. Practical Tips for Maintaining a Balanced Diet.

(a) **Portion Control.** Pay attention to portion sizes to avoid overeating.

(b) **Whole Foods.** Focus on whole, unprocessed foods as they are more filling and nutritious.

(c) **Regular Meals.** Eat at regular intervals to maintain steady blood sugar levels and avoid binge eating.

(d) **Hydration.** Drink plenty of water throughout the day to help control hunger and stay hydrated.

(e) **Plan Meals.** One should take time to plan meals for the week to including a variety of nutrients in the diet.

(f) **Read Labels.** When shopping, food labels should be read to make informed choices about what one is consuming.



(g) **Cook at Home.** Meals should be prepared at home, where one can control the ingredients and portion sizes.

(h) **Limit Processed Foods.** Minimize the intake of processed foods, which often contain high levels of salt, sugar and unhealthy fats.

10. **Foods to Focus on.** In a nutritious diet the foods to focus on are:-

(a) **Whole grains.** Brown rice, whole wheat bread and oats.

(b) **Lean proteins.** Chicken, fish, beans and lentils.

(c) **Fresh fruits and vegetables.**
Aim for 5 servings per day.

(d) **Low-fat dairy.** Milk, yogurt and cheese.

(e) **Healthy fats.** Nuts, seeds, avocados and olive oil.

11. **Foods to Limit.** Must limit consumption of following food items:-

(a) **Sugary Drinks.** Soda, sports drinks and energy drinks.

(b) **Fast Food and Processed Snacks.** Limit or avoid foods high in salt, sugar and unhealthy fats.

(c) **Saturated and trans fats.** Limit or avoid foods high in saturated and trans fats such as butter, lard and partially hydrogenated oils.

12. **Food Label.** Food label offers critical information about the nutritional composition of the food and is designed to help consumers make better choices.

13. **Reading and Interpreting Food Labels.**

The skill of reading food labels is crucial for making informed dietary decisions. By understanding the serving sizes, calorie content, nutrient breakdown, and ingredients list, you can more effectively assess the healthiness of a product. With time and practice, interpreting food labels becomes simpler, allowing you to take charge of your nutrition and make choices that support your health goals. Packaged foods include a standardized "Nutrition Facts" label to help guide these decisions.

DID YOU KNOW?

➤ Our body can store carbohydrates as glycogen for later use, providing a quick energy source during physical activity

	Typical values	100ml contains	250ml contains	%GDA*
Energy		199kJ 47kcal	500kJ 120kcal	6% 2000kcal
Protein		0.5g	1.3g	
Carbohydrate of which sugars		10.5g	26.3g	29% 90g
Fat of which saturates		trace	trace	
Fibre		trace	trace	
Sodium		trace	trace	
Salt equivalent		trace	trace	

*Guideline daily amounts

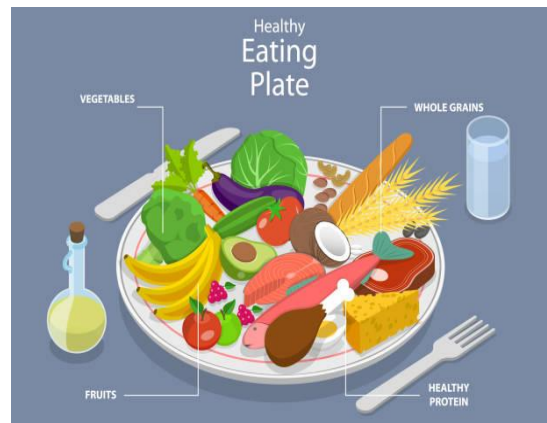
Vitamins/Minerals

100ml contains 62.5mg (100%

14. On a food label, the undermentioned components are found and each of these components provides insight into the healthiness of the food one is consuming:-

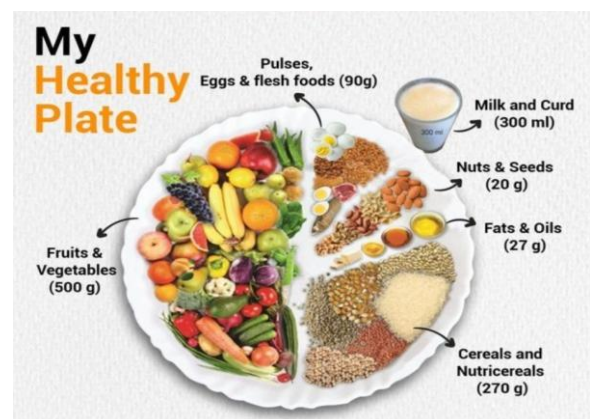
- (a) Serving Size
- (b) Calories
- (c) Nutrients (Fats, Carbohydrates, Proteins, etc.)
- (d) Percent Daily Values (%DV)
- (e) Ingredients List

15. **Meal Planning.** Meal planning is the process of preparing a week’s worth of meals in advance, allowing individuals to make thoughtful, health-conscious decisions about their diet. It involves creating a menu, shopping for ingredients, and organizing meals to meet specific nutritional needs or lifestyle goals, such as weight management or fitness targets. By planning ahead, meal prepping reduces the stress of last-minute cooking, minimizes food waste, and helps maintain a balanced diet. It also offers financial benefits, as buying ingredients in bulk and sticking to a plan can cut down on unnecessary purchases.



16. **Meal Planning During NCC Camps.** NCC Camps are typically periods of intense physical activities including PT, games, shooting, obstacle training etc. and place a nutritional demand on the body. Accordingly the meals during camps, have to be rich in proteins, apart from carbohydrates, and low in oil/fat content. For **moderate to high activity**, aim for:

- (a) **2,800–3,500 calories/day**
- (b) **Carbs.** 50–60% (main fuel)
- (c) **Protein.** 15–20% (for muscle recovery)
- (d) **Fats.** 20–30% (long-lasting energy)
- (e) **Hydration.** Minimum 3–4 litres/day (more with sweat or heat).



17. **Adoption of Healthy Cooking Methods.** Adopting healthy cooking methods is essential for preserving the nutritional value of food while reducing the intake of unhealthy fats, sugars, and salts. Here are some tips for healthier cooking:



- a) **Use Healthy Oils.** Opt for oils that are rich in healthy fats, such as olive oil or avocado oil, instead of butter or margarine.
 - b) **Grilling, Steaming, and Baking.** These methods help retain the nutrients in food without adding extra fat. Grilling and baking can also enhance the flavor of food without excessive oil.
 - c) **Sautéing with Minimal Oil.** When sautéing vegetables or proteins, use only a small amount of oil or choose non-stick cookware to reduce the amount of oil needed.
 - d) **Slow Cooking and Stewing.** These methods allow for tenderizing tougher cuts of meat and infusing flavor without excessive use of fats.
 - e) **Avoid Deep Frying.** Instead of deep frying, use alternative methods such as baking, grilling, or air frying, which can achieve a similar crispy texture without excess oil.
 - f) **Boiling and Poaching.** These are excellent techniques for cooking vegetables, eggs, and fish, allowing the natural flavors to come out without added fats or calories.
 - g) **Incorporate Fresh Ingredients.** Prioritize fresh vegetables, lean proteins, and whole grains to ensure your meals are nutrient-dense.
 - h) **Control Seasoning.** Use herbs, spices, and citrus to enhance flavor rather than relying on high-sodium condiments like soy sauce or pre-made sauces.
18. **Nutritious Eating Habits.** Nutritious eating habits include the following:-
- (a) Eat a variety of foods, including fruits, vegetables, whole grains, protein foods, and fat-free or low-fat dairy.
 - (b) Enjoy fruits and vegetables for key nutrients and dietary fiber.
 - (c) Be mindful of nutrient needs.
 - (d) Go easy on salt.
 - (e) Shift toward healthier sweet options.
 - (f) Strive for a healthy weight.

HIGHER ORDER THINKING SKILLS (HOTS)

- **How would you compare the benefits of eating fruits and vegetables with the risks of eating too much junk food?**
- **Why is it important to include both proteins and carbohydrates in your daily diet? How do they work together to keep you healthy and energized?**
- **Imagine you are planning a healthy meal for your family. How would you plan include all the important nutrients like vitamins, minerals, and protein?**



CONCLUSION

19. In conclusion, diet and nutrition are vital components of maintaining overall health and well-being. A balanced diet, rich in essential macro- and micronutrients such as carbohydrates, proteins, fats, vitamins, minerals, and water, supports the body's functions, boosts energy, promotes growth and repair, and reduces the risk of chronic diseases. By following dietary guidelines, practicing portion control, and focusing on whole, nutritious foods, individuals can improve their physical and mental health, manage their weight, and enhance their quality of life. It is crucial to adopt healthy eating habits, stay hydrated, and make informed choices based on food labels, ensuring that the body receives the necessary nutrients for optimal performance and longevity.

SUMMARY

- Diet is the type and quantity of food we consume, while nutrition refers to how the body absorbs and utilizes nutrients from food.
- A diet includes the food and drinks consumed daily and can refer to a specific eating plan for health or medical reasons.
- Proper diet and nutrition support growth, repair cells, and maintain bodily functions.
- A balanced diet is crucial for efficient body function, preventing illness, fatigue, infection, and decreased performance.
- It includes essential nutrients like carbohydrates, proteins, fats, vitamins, and minerals.
- Nutrition is the process by which the body absorbs and uses nutrients to maintain health and prevent diseases.
- Balanced Diet Benefits Provides essential nutrients for proper body function. Supports immune health, reduces disease risk, promotes growth, boosts energy, improves mental health, aids weight management, and enhances longevity.
- Dietary guidelines are designed to promote overall health, prevent chronic diseases, and maintain a healthy weight.
- Food Labels provide nutritional information to help make informed choices.
- Meal Planning helps in saving time, meeting nutritional goals, and reducing grocery costs.
- Adopting healthy cooking methods is essential for preserving the nutritional value of food while reducing the intake of unhealthy fats, sugars, and salts.



ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the primary source of energy for the body?

- (a) Carbohydrates
- (b) Proteins
- (c) Fats
- (d) Fiber

Q2. Which nutrient is essential for building and repairing muscles, bones, and tissues?

- (a) Carbohydrates
- (b) Proteins
- (c) Fats
- (d) Vitamins

Q3. What is the recommended daily intake of water?

- (a) 3-4 Litres
- (b) 5-6 Litres
- (c) 1-2 Litres
- (d) 4-5 Litres glasses

Q4. What is the recommended percentage of protein for a balanced diet?

- (a) 55—65%
- (b) 15-20%
- (c) 135%
- (d) None of the above

Q5. What is the function of fiber in the body?

- (a) Helps with digestion.
- (b) Regulates blood sugar levels.
- (c) Supports heart health.
- (d) All of the above.

Q6. What does fat include?

- (a) Saturated Fat
- (b) Trans Fat
- (c) Sugar
- (d) (a) and (b) above

Q7. Benefits of a balanced diet include?

- (a) Improved immune function
- (b) Lethargy
- (c) Acidity
- (d) All of the above.

Q8. What is the main purpose of a balanced diet?

- (a) To improve taste



- (b) To provide essential nutrients for the body
- (c) To lose weight quickly
- (d) To reduce food intake

Q9. Which of the following is NOT a component of a balanced diet?

- (a) Carbohydrates
- (b) Vitamins
- (c) Alcohol
- (d) Proteins

Q10. What role do carbohydrates play in the body?

- (a) Build and repair tissues
- (b) Provide energy and spare proteins
- (c) Support immune function
- (d) Regulate hormones

Q11. Vitamin important for vision is?

- (a) Vitamin D
- (b) Vitamin B
- (c) Vitamin A
- (d) All of the above.

Q12. The food component which is the building block for our body is?

- (a) Vitamins
- (b) Fats
- (c) Proteins
- (d) All of the above.

Q13. Food label includes the following?

- (a) Ingredients List
- (b) Percent Daily Values (%DV)
- (c) Nutrients (Fats, Carbohydrates, Proteins, etc.)
- (d) All of the above.

Q14. Function of minerals is to?

- (a) Regulate body processes, protect against disease.
- (b) Provide energy, store vitamins, and protect organs.
- (c) Build bones, teeth, and support metabolism..
- (d) All of the above.

Q15. Sources of Proteins are?

- (a) Fish
- (b) Eggs
- (c) Beans
- (d) All of the above.



Short Answer Questions

- Q1.** What do you understand by Diet?
- Q2.** What do you understand by Nutrition?
- Q3.** What are sources of Proteins?
- Q4.** What is a Food Label?
- Q5.** What is the nutritional requirement for adolescents?

Long Answer Questions

- Q1.** What is the function of food components?
- Q2.** What are the components of a balanced diet for optimal health?
- Q3.** What is the role of Nutrients for our body?
- Q4.** What are the types and functions of carbohydrates?
- Q5.** What do the components on a Food Label and why do they matter

**PHYSICAL AND MENTAL WELLNESS (JD/JW)****CHAPTER PMW IX : YOGA**

“Yoga is the practice of quietening the mind.”

Maharishi Patanjali

**TEACHING INSTRUCTIONS**

Period	:	Two (02)
Type	:	Lecture and Practice
Year	:	2nd Year JD/JW
Conducting Officer	:	Associate NCC Officer
<u>Training Aids</u>	:	Script/ Lesson Plan; Presentation on Computer/ Chart

Time Plan

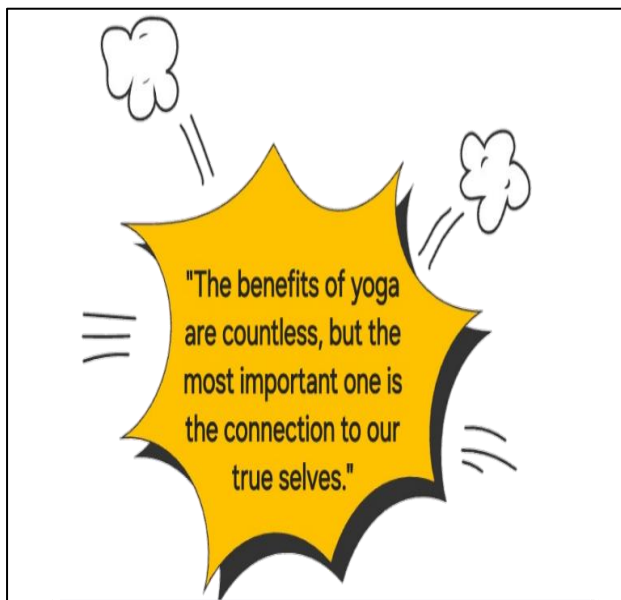
• Introduction	:	03 Mins
• Part I	:	07 Mins
• Part II	:	30 Mins
• Part III	:	30 Mins
• Part IV	:	07 Mins
• Conclusion	:	03 Mins



INTRODUCTION

1. Yoga is a practice that encompasses physical, mental, and spiritual elements and has its roots in India, dating back over 5,000 years. The word "yoga" is derived from the Sanskrit term "YUJ," which means "to unite" or "to join." The primary goal of yoga is to harmonize the body, mind, and consciousness, promoting overall well-being and helping practitioners realize their full potential. International Yoga Day is celebrated on 21st June every year.

2. Yoga is an ancient practice that improves physical health and enhances mental and emotional well-being. *Maharishi Patanjali*, the father of yoga, initially propounded it. In this chapter, we will explore the importance of yoga for physical fitness, learn about some key yoga postures (*asanas*), and practice breathing exercises (*Pranayama*) that promote overall health and vitality.



LEARNING OBJECTIVES

- Understand the importance of yoga for physical fitness.
- Identify and perform key yoga asanas that improve flexibility, strength and balance.
- Learn pranayama techniques to enhance lung capacity and promote relaxation.
- Develop a basic understanding of how yoga contributes to overall wellness.
- Integrate yoga into their daily routine for physical fitness and mental well-being.

PREVIEW

The lecture will be conducted in the following parts:

- (a) Part I : Importance of Yoga
- (b) Part II : Major Asanas
- (c) Part III : Pranayama
- (d) Part IV: Practical Application

INTERESTING FACTS

- Yoga is over 5,000 years old: Yoga originated in ancient India, with the first written records dating back to 3000 BC.
- Yoga was initially a spiritual practice: Yoga was originally a way to connect with the divine and achieve spiritual enlightenment.
- The word "Yoga" means "union": The Sanskrit word "Yoga" means "to unite" or "to join," referring to the union of body, mind and spirit.



PART I : IMPORTANCE OF YOGA

3. **Definition of Yoga.** Yoga is a holistic practice that unites the body and mind through physical postures (asanas), breathing techniques (Pranayama), wisdom, and meditation to foster physical, mental, and spiritual health. It's not just about physical exercise but a complete science encompassing various aspects of life.

4. **Key Elements of Yoga.** Most popularly and commonly, yoga is understood only with one aspect of some physical exercise and postures, while it is a complete Science that includes:-:-

(a) **Life Style Practice.** A healthy lifestyle is the fundamental key element of yoga. By adopting healthy habits in daily life, such as mindful eating, regular exercise, proper sleep, stress management, and mental clarity, yoga can be fully integrated into one's lifestyle.

(b) **Physical Posture.** Physical Postures in Yoga are termed as Asana. Asana means Stabilizing the body in a particular posture for some time that enhances muscular strength, proper functioning of targeted organs, and complete physical health.

(c) **Breathing technique.** This is known as Pranayama. The intended breathing with awareness is called Pranayama. It includes Inhalation, Holding the breath in, exhalation, and holding the breath out differently.

(d) **Meditation.** Meditation / *Dhyana* is the relaxation of the mind. It is the only source of mental hygiene.

INTERESTING FACTS

- **Ashtang Yoga/ Eight Limbs** of Yoga explains the methods and techniques to practice them and achieve the aim of Yoga- Self-realisation.
 - **Yama.** The individual practice of social ethics.
 - **Niyama.** Physical & mental hygiene.
 - **Asana.** Posture in which the body is stabilised for some time
 - **Pranayama.** expand vital life force energy through the deliberate control of respiration.
 - **Pratyahara.** Withdrawing the senses inward.
 - **Dharana.** Art of effortless concentration.
 - **Dhyana.** Meditation – the deep relaxation of the mind
 - **Samadhi.** The state of equanimity and tranquility.

5. Benefits of Yoga for Physical Fitness.

- (a) **Flexibility.** Regular yoga practice improves flexibility by stretching and lengthening the muscles.
- (b) **Strength.** Specific *asanas* build muscle strength by using body weight to target different muscle groups.
- (c) **Balance.** Many yoga poses improve coordination and balance, helping to stabilize the body and prevent injuries.
- (d) **Improved Posture.** Yoga promotes proper alignment and posture, reducing the risk of back pain and muscle strain.
- (e) **Stress Relief.** Yoga calms the nervous system, reducing stress and promoting relaxation.
- (f) **Mind-Body Connection.** Yoga fosters awareness of body movements, making individuals more mindful of their physical health.



PART II : MAJOR ASANAS (INCLUDING PRACTICE)

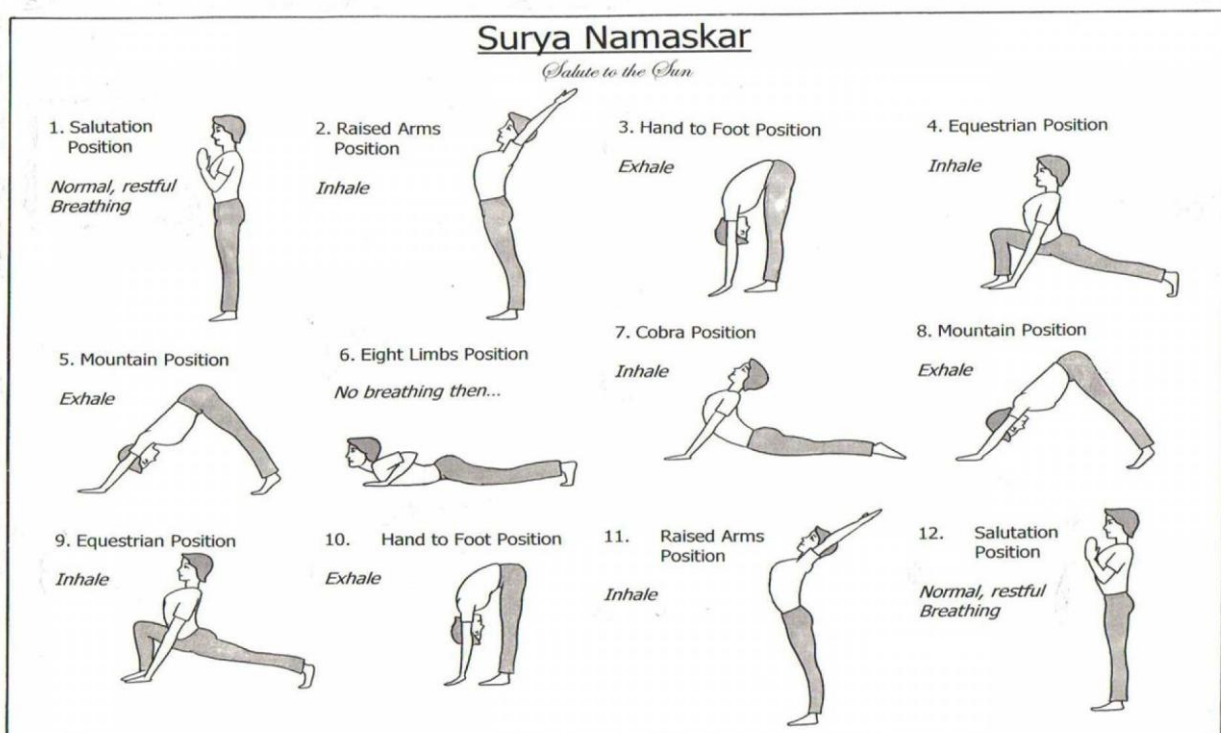
6. **Asana.** Asana is a Sanskrit word meaning "posture," "seat," or "place." In yoga, *asanas* are the practices performed to develop any part of the body. *Asanas* are the physical body positions or poses of *yoga* that form the foundation of a modern Hatha yoga practice.
7. Preparation before doing yoga is crucial. Make the following preparations before starting yoga:-
 - (a) **Food.** Empty stomach yoga is more beneficial. One should refrain from doing Asana for at least 2 hours after eating.
 - (b) **Proper Space.** The place should be clean and free of noise, including outside sounds, for yoga.

- (c) **Age Limit.** There is no age limit to do yoga.
- (d) **Timings.** Yoga practice is beneficial from 4 am to 7 am in *Brahma Muhurat*. *Brahma Muhurat* is the time before sunrise, considered the most auspicious time for spiritual practices in Indian tradition. It is believed that the mind is most calm and receptive during this time.
- (e) **Procedure.** Let's start with *Pawan Mukh Shrinkhala* and then do the Asanas, *Pranayama*, and *Dhyana*.
- (f) **Dress.** Loose-fitting Cotton fabric dress is the most suitable for doing asanas.
- (g) **Bathing.** Taking baths with cold water before performing the asana has been considered beneficial.
- (h) **Prayer.** One should pray with folded hands while sitting in *Sukhasana* or standing in *Tadasana*.

8. Some of the major *Asanas* are as follows. It is advised that *Yoga Asanas* be performed regularly to develop and maintain good health.

9. **Surya Namaskara.**

- (a) **How to Perform.** The *Surya Namaskara* has 12 positions. A complete cycle is completed in 12 positions, where each position is performed twice.
- (b) **Benefits.** This asana provides the following benefits.
 - (i) Reduces abdomen.
 - (ii) Increases the flexibility of spinal cord and other joints
 - (iii) Increases breathing capacity.



10. **Tadasana.**

(a) **How to Perform.**

- (i) Stand with both feet together, fingers of the hands open and the thighs should be touching each other.
- (ii) Distribute the body weight equally between the heels and the toes.
- (iii) Raise the hands straight up. Lift the heels. Pull the body upwards.

(b) The **benefits** are as follows:-

- (i) A feeling of lightness is experienced in the body.
- (ii) The mind is free from stress.
- (iii) The stiffness in the leg is relieved

TADASANA
THE PALM TREE POSE



11. **Trikonasana.**

(a) **How to Perform.**

- (i) Stand with your legs apart. Open your arms at shoulder height.
- (ii) Bend your waist to the right and bring your right hand down to the ground near the ankle of your right foot.
- (iii) Keep your legs straight and your left hand stretched above your head parallel to the ground.

(b) **Benefits.** The **benefits** are as follows:-

- (i) The spine and its muscles become strong.
- (ii) Fat in the ribs decreases.
- (iii) The body's stiffness is alleviated.
- (iv) The lungs' capacity to hold air increases.



12. **Garudasana.**(a) **How to Perform.**

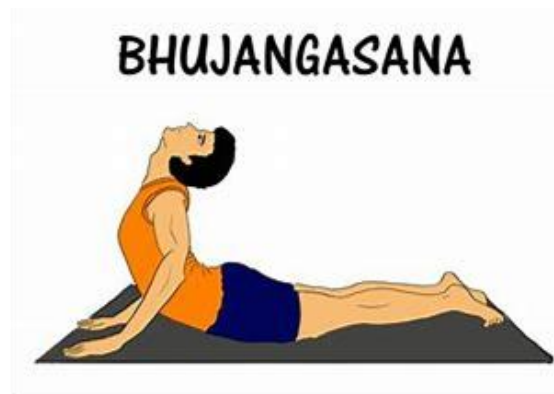
- (i) Lift the right leg and wrap it around the left leg. The right leg should be on the calf of the left leg.
- (ii) Now bend the arms and wrap the right arm around the left arm.
- (iii) The palms should be together.

*garudasana*(b) **Benefits.** The benefits are as follows:-

- (i) Strengthens the muscles.
- (ii) Makes the nervous system function properly.
- (iii) Loosens the joints of the legs and increases control.

13. **Bhujangasana.**(a) **How to Perform.**

- (i) Lie down on your stomach.
- (ii) Place your palms beside your shoulders.
- (iii) Inhale and raise your head, chest, and abdomen.
- (iv) Keep your thighs, hips, and legs touching the floor.
- (v) Look upward and hold the pose for four breaths.

(b) **Benefits.** This asana has the following benefits:-

- (i) The spinal cord and chest become strong.
- (ii) Strengthens the back and stomach muscles.
- (iii) Eliminates constipation and increases digestive power.

14. **Vairasana.**

(a) **How to Perform.** *Vairasana* is the only asana that can be practiced immediately after having food.

- (i) Kneel on a mat with your knees together. Your feet should be flat on the floor and your toes straight back.

(ii) Gently lower down your hips and sit on your calves. If this is too intense for your knees, place a cushion or folded blanket under your hips for comfort.

(iii) Rest your hands on your knees. Keep your fingers relaxed and straight.

(iv) Engage your core, keep your back straight, and sit upright. Your neck and head should align with your spine. Don't lean forward or backward.

(v) Close your eyes and slow your breath. Hold the position for as long as you feel comfortable.

VAJRASANA



(b) **Benefits.** This asana has the following benefits:-

- (i) Improved digestion.
- (ii) Strengthening of pelvic muscles.
- (iii) Relief from constipation.
- (iv) Reduced stress and anxiety.
- (v) Improved blood circulation.

15. **Halasana.**

(a) **How to Perform.**

- (i) Lie down in *Shavasana*.
- (ii) Bring both feet together while inhaling; lift the feet up. While exhaling, bring the feet back behind the head.
- (iii) Keep the feet straight and place the palms above the head.

HALASANA



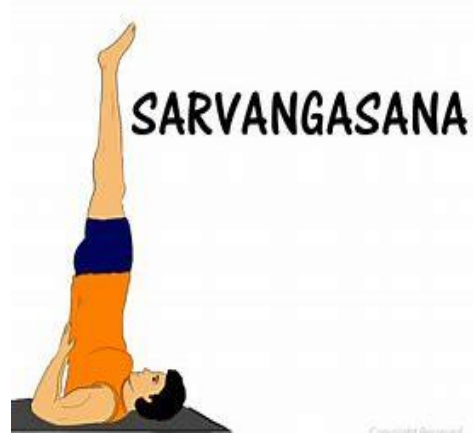
(b) **Benefits.** The benefits are as follows:-

- (i) Flexibility in the spine increases, and the shoulders become stronger.
- (ii) The functioning capacity of the lungs increases.
- (iii) Gas in the stomach and constipation is relieved.
- (iv) Digestive power increases.

16. **Sarvangasana.**

(a) **How to Perform.**

- (i) Lie on your back, inhale, and lift your legs, exhale and come into *Halasana*.
- (ii) Placing both hands on your back and pointing your legs straight up towards the sky.



(b) **Benefits.** The benefits are as follows:-

- (i) Helps to relieve fatigue and brings vitality.
- (ii) Removes constipation and enhances digestive power.
- (iii) Keeps the throat, nose, and eyes healthy.
- (iv) Promotes blood circulation.

17. **Paschimotanasana.**

(a) **How to Perform.**

- (i) Sit on the ground with your legs straight
- (ii) in front of your body.
- (iii) Bend your waist forward.
- (iv) Hold your toes with your middle finger and
- (v) pull them towards you.

PASCHIMOTTANASANA
THE FORWARD BEND POSE



(b) **Benefits.** The benefits are as follows:-

- (i) This reduces unwanted fat in the stomach.
- (ii) This improves the health of the intestines and increases digestive power.

18. **Ardhmatsyendrasana.**

(a) **How to Perform.**

- (i) Sit with both legs extended in front of you. Keep the right leg bent at the knee while placing the sole of the left foot on the ground outside the left knee.



(ii) Bend the left leg at the knee and place its heel against the thigh.

(iii) Twist the torso to the left, wrapping the right arm around the left knee from above to hold the left leg. Rotate the spine to the left and bring the left hand behind.

(iv) Then, turn the head towards the left shoulder.

(b) **Benefits.** The benefits are as follows:-

(i) It makes the spine flexible.

(ii) It eliminates digestive disorders.

ARDHA MATSYENDRASANA HALF SPINAL TWIST POSE



19. **Vrikshasana.**

(a) **How to Perform.**

(i) Stand straight, bend one leg and place it on the other thigh.

(ii) Raise your hands and bring your palms together.

(iii) Keep your gaze forward, straighten your arms and lift your body.

(b) **Benefits.** The benefits are as follows:-

(i) Physical balance is created.

(ii) Relieves flatulence.

(iii) Stomach muscles become stronger.

VRIKSHASANA THE TREE POSE



20. **Padhastasana.**

(a) **How to Perform.**

(i) Stand straight.

(ii) Exhale, bend forward, and place your hands on the ground.

(iii) Bring your head to your knees.

(b) **Benefits.** The benefits are as follows:-

(i) Hamstring muscle stretched.

(ii) The hip joint becomes loose.

PADAHASTASANA



- (iii) Reduces belly fat.

21. **Chakrasana.**

(a) **How to Perform.**

- (i) Lie on your back.
- (ii) Bend both legs and bring your heels together with your buttocks.
- (iii) Place your hands near your head with your fingers pointing towards you and lifting your body.

CHAKRASANA
THE WHEEL POSE



(b) **Benefits.** The benefits are as follows:-

- (i) It brings flexibility and strength to the spine.
- (ii) Blood supply to the brain is fulfilled.
- (iii) Relief from diseases such as headaches and migraines.
- (iv) It removes weakness and stops the trembling of hands and feet.

22. **Shavasana.**

(a) **How to Perform.**

- (i) Lie on your back, bring your arms and legs together, with your palms facing upwards, keep. Make sure that both legs are loose and your entire body is relaxed.
- (ii) Keep both eyes closed.



(b) **Benefits.** The benefits are as follows:-

- (i) It calms the mind and relieves stress.
- (ii) It helps in achieving yogic sleep.
- (iii) It removes physical fatigue.
- (iv) It corrects high blood pressure, mental imbalance, and memory power.



23. **Dhanurasana.**

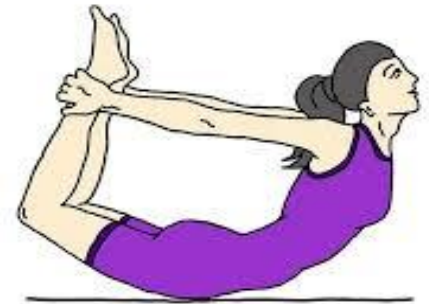
(a) **How to Perform.**

- (i) Lie on your stomach, bend both legs and lift them up from the knees
- (ii) Hold the back of the ankles with both hands and pull, bringing the entire body weight onto the stomach.

(b) **Benefits.** The benefits are as follows:-

- (i) Tension in the waist is relieved.
- (ii) Digestive power increases, and constipation is alleviated.
- (iii) The spine becomes more substantial and more flexible.

DHANURASANA
THE BOW POSE



24. **Pawanmuktasana.**

(a) **How to Perform.** Lie on your back, bending your legs towards your chest, hold with both hands and place your head between your knees.

(b) **Benefits.** The benefits are as follows:-

- (i) Release of flatulence.
- (ii) Digestive power increases
- (iii) Intestines gain strength.

PAVANAMUKTASANA



25. **Sukhasana.**

(a) **How to Perform.** Bend your legs and sit in a comfortable position, keep your back straight, and place both hands on your knees, close your eyes, and take long deep breath.

(b) **Benefits.** The benefits are as follows:-

- (i) Relieves physical and mental stress.
- (ii) It is the best posture for practice and meditation.
- (iii) The body gets relaxation.

SUKHASANA
THE EASY SITTING POSE



PART III : PRANAYAMA (INCLUDING PRACTICE)

26. **Pranayama**. The term is derived from several Sanskrit roots: prana, meaning "vital life force," Yama, meaning "control," and ayama, meaning "extension" or "expansion." The breath is symbolic of prana, and Pranayama is a method of extending and expanding vital life force energy through the deliberate control of respiration.

27. **Pre-Pranayama Preparations**.

- (a) Find a quiet and comfortable place to sit.
- (b) Sit comfortably with your back straight (e.g., *Padmasana*, *Vajrasana*, or *Sukhasana*).
- (c) Close your eyes and relax your body.



DID YOU KNOW?

The two nostrils harness different types of energy & emotions-

- Right nostril channels the 'Surya Swar' / *Pingla Nadi*(nerve)
- Left nostril channels the 'Chandra Swar' / *Ida Nadi*(nerve)

28. **Types of Pranayama**. *Pranayama* can be performed in any meditative posture. The types of *Pranayama* are:-

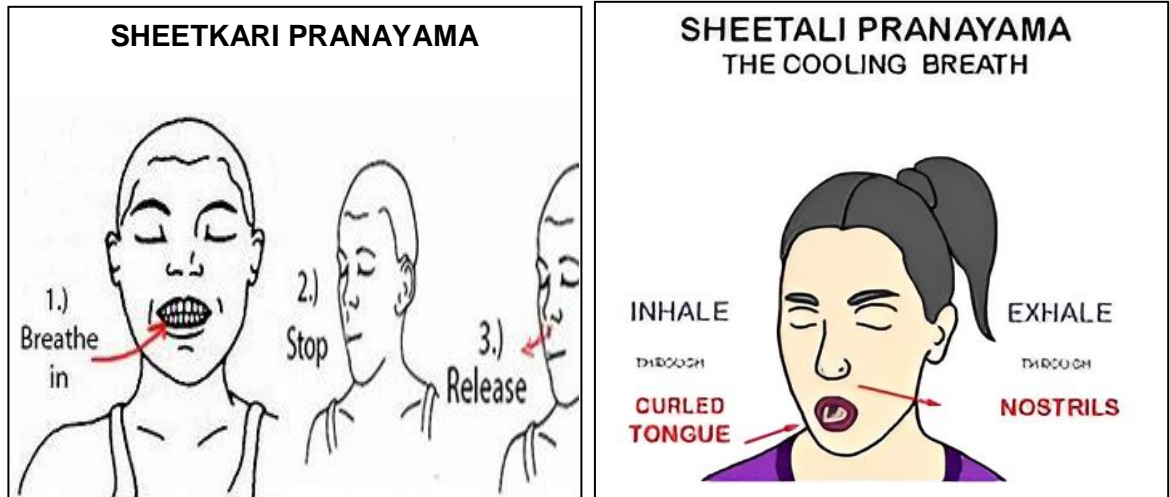
(a) **Anulom-Vilom Pranayama**. It is also called Alternate Nostril breathing. Press the right nostril with the right thumb gently to block the correct entrance for breath. Inhale through the left nostril, hold the breath, press the left nostril with middle and ring fingers to block the left exit for breath, exhale through the right nostril, then inhale through the right nostril, hold the breath, and exhale through the left nostril and vice-versa.

SURYA BHEDA PRANAYAMA THE VITALIZING BREATH



(b) **Surya Bhedi Pranayama**. Press the left nostril with the help of the ring finger to block the left entrance for breath. Inhale through the right nostril, hold the breath and exhale through the left nostril.

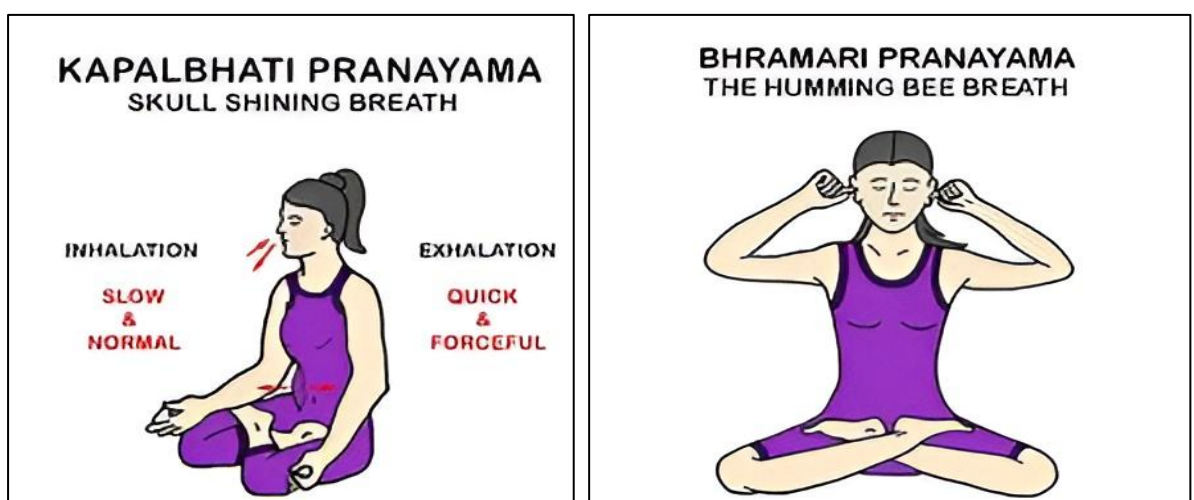
(c) **Sheetkari Pranayama**. Place the teeth next to each other, touch the tongue to the lower teeth, inhale through the mouth without holding the breath, and exhale through both nostrils. This is beneficial for good dental health, to control high blood pressure, and to hydrate the body.



(d) **Sheetali Pranayama**. Stick out your tongue, form it like a beak, and breathe in through your mouth. Hold your breath and exhale through both nostrils. It is beneficial to control high blood pressure, hydrate the body, and prevent heat stroke. *Sheetali* Pranayama cools down the body and mind.

(e) **Kapalbhati Pranayama**. Inhale slowly and normally. Exhale quickly with force, leaving out any impurities, causing the abdomen to move back and forth. This exercise improves the function of the digestive and excretory systems of the body.

(f) **Bhramari Pranayama**. Make a humming sound like a bee while holding your breath through both nostrils and exhaling through both nostrils while making the sound. This practice calms the mind from overthinking and improves concentration.



(g) **Udgeeta Pranayama**. Take a long, deep breath from both nostrils and while breathing out, chant 'OM' during the complete exhalation. This is the most essential Pranayama for the practitioner to be in the meditative state.



29. **Benefits of *Pranayama*.**

- (a) *Pranayama* improves the lung capacity.
- (b) It increases stamina by making respiration longer and more profound.
- (c) *Pranayama* improves immunity.
- (d) It increases the concentration power of the mind.
- (e) *Pranayama* cleanses the body from the inside.
- (f) It improves anabolism, metabolism, and catabolism of the Human body.

30. **Post-*Pranayama* Relaxation.**

- (a) Sit quietly for a few minutes with your eyes closed.
- (b) Focus on your breathing and feel calm and relaxed.
- (c) Gradually open your eyes and take a few deep breaths before getting up.

PART IV : PRACTICAL APPLICATION

31. Yoga is often celebrated for its physical benefits, yet its philosophical foundation offers profound wisdom applicable to all facets of life. Yoga philosophy encompasses principles that transcend cultural and temporal boundaries, providing a timeless guide for living with purpose, balance, and harmony.



32. **Relevance in Modern Life.** In modern life, yoga helps in the following:-

(a) **Stress Management and Mental Health.**

- (i) The principles of mindfulness and non-attachment (*Vairagya*) help individuals navigate stress and anxiety.
- (ii) Breathing techniques (*Pranayama*) provide immediate relief and long-term mental stability.

(iii) **Ethical Leadership.**

- (iv) Applying *Yamas*, such as non-violence and integrity, can transform workplaces into more compassionate and equitable environments.
- (v) Self-discipline fosters accountability and resilience in professional settings.

(b) **Sustainable Living.** Yoga philosophy's emphasis on simplicity aligns with eco-conscious lifestyles, encouraging mindful consumption and environmental stewardship.



HIGHER ORDER THINKING SKILLS (HOTS)

- Analyze the importance of yoga in maintaining physical and mental wellness. How can yoga help NCC cadets in their daily lives?
- Compare and contrast different types of yoga. Highlight the significance of a suitable place for performing Yoga.
- Design a simple yoga routine that can help NCC cadets improve these physical attributes.

CONCLUSION

31. Embracing the timeless wisdom of yoga philosophy offers a transformative approach to modern challenges. Its universal principles provide a framework for ethical living, personal growth, and global harmony. By integrating these teachings into our lives, we enhance our individual well-being and contribute to a more compassionate and balanced world. Yoga is a holistic practice that offers numerous benefits for physical fitness, mental wellness, and emotional resilience. As NCC students, incorporating yoga into your daily routine can significantly enhance physical performance, reduce injuries, and promote overall wellbeing.

SUMMARY

- Yoga is a holistic practice that unites the body, mind, and consciousness to promote well-being and self-realization.
- The founder of yoga is *Maharishi Patanjali*, who combined physical postures (*asanas*), breathing techniques (*Pranayama*), wisdom, and meditation.
- Physical Postures (*Asanas*) stabilize the body and promote bodily health.
- Breathing Techniques (*Pranayama*) enhance breath control and energy flow.
- Meditation relaxes the mind and promotes mental clarity.
- The benefits of Physical Fitness include improved flexibility, strength, balance, and posture, reduced stress, enhanced mind-body connection, and promotion of overall health.
- Yoga Postures (*Asanas*) are physical postures that target body parts for strength, flexibility, and alignment. Common asanas are *Surya Namaskar* (Sun Salutation), *Taadasana* (Mountain Pose), *Trikonasana* (Triangle Pose), *Bhujangasana* (Cobra Pose), *Vajrasana* (Thunderbolt Pose).
- *Pranayama* (Breathing Techniques) are controlled breathing techniques to improve lung capacity, stamina, and focus. Popular types of pranayama are *Anulom-Vilom* (Alternate Nostril Breathing), *Kapalbhathi* (Breath of Fire), *Bhramari* (Bee-Breath).
- Yoga Philosophy focuses on principles like mindfulness and non-attachment and helps manage stress, and improves mental health.

**ASSESSMENT EXERCISE****Multiple Choice Questions**

Q1. What is the origin of the word "yoga"?

- (a) Sanskrit word "yuj" meaning "to unite"
- (b) Hindi word "yoga" meaning "physical exercise"
- (c) Tamil word "yoga" meaning "meditation"
- (d) Chinese word "yoga" meaning "breathing techniques"

Q2. Which of the following is NOT a benefit of yoga?

- (a) Improved flexibility
- (b) Increased strength
- (c) Enhanced cardiovascular endurance
- (d) Reduced intelligence

Q3. What is the name of the yoga pose that is also known as "tree pose"?

- (a) Vrksasana
- (b) Virabhadrasana
- (c) Trikonasana
- (d) Bhujangasana

Q4. Who is considered the father of yoga?

- (a) Patanjali
- (b) B.K.S. Iyengar
- (c) K. Pattabhi Jois
- (d) Swami Vivekananda

Q5. What is the name of the ancient Indian text that describes yoga?

- (a) Yoga Sutras of Patanjali
- (b) Bhagavad Gita
- (c) Upanishads
- (d) Vedas

Q6. Which of the following the following benefits are seen by doing Trikonasan?

- (a) Spine and its muscles become strong.
- (b) Fat in the ribs decreases.
- (c) The body's stiffness is alleviated
- (d) All of the above

Q7. The Surya Namaskar has how many positions:-

- (a) 10 positions.
- (b) 11 positions.
- (c) 12 positions.
- (d) 13 positions.

Q8. Which of the following benefits are seen by doing Padhasana?

- (a) Hamstring muscle stretched.
- (b) The hip joint becomes loose.
- (c) Reduces belly fat.
- (d) All of the above

Q9. Methods to extend and expand vital life force energy through the deliberate control of respiration is called:-

- (a) Virabhadrasana.
- (b) Pranayam.



- (c) Salabhasana. (d) Dhanurasana.

Q10. Which of the following yoga postures is beneficial for improving balance and coordination?

- (a) Vrikshasana (b) Tree Pose
(c) Eagle Pose (d) All of the above

Q11. What is the name of the Pranayama technique that involves rapid inhalation and exhalation through the nose?

- (a) Bhastrika Pranayama (b) Kapalabhati Pranayama
(c) Anuloma Viloma Pranayama (d) Ujjayi Pranayama

Q12. Which of the following pranayama techniques is beneficial for calming the mind and promoting relaxation?

- (a) Ujjayi Pranayama (b) Bhramari Pranayama
(c) Anuloma Viloma Pranayama (d) All of the above

Q13. What is the name of the pranayama technique that involves breathing through one nostril and then the other?

- (a) Anuloma Viloma Pranayama (b) Kapalabhati Pranayama
(c) Bhastrika Pranayama (d) Ujjayi Pranayama

Q14. Which of the following pranayama techniques is beneficial for improving lung capacity and respiratory endurance?

- (a) Bhastrika Pranayama (b) Kapalabhati Pranayama
(c) Anuloma Viloma Pranayama (d) All of the above

Q15. Following is the practical application of Yoga Philosophy:-

- (a) Personal growth. (b) Community Building.
(c) Global Perspective. (d) All of the above

Short Answer Questions

- Q1. Why is yoga important for physical and mental well-being?
Q2. Name two major asanas and their benefits?
Q3. What is pranayama and how does it help in relaxation?
Q4. How can yoga be incorporated into daily routines?
Q5. Mention one practical application of yoga is stress management?



Long Answer Questions

- Q1. Discuss the importance of yoga, focusing on its physical, mental and emotional benefits? Explain the role of major asanas in promoting overall health?
- Q2. Explain the concept of pranayama, its techniques and its practical applications in daily life for managing stress and improving focus?
- Q3. What are the preparations to be done before doing Yoga?
- Q4. What is the relevance of Yoga in Modern Life?
- Q5. Give out the practical applications of Yoga.

ANSWER KEY TO MCQ : ME

Answer key to MCQ : ME (Chapter - I)

Q1. (c)	Q2. (c)	Q3. (b)	Q4. (b)
Q5. (b)	Q6. (c)	Q7. (b)	Q8. (b)
Q9. (b)	Q10. (b)	Q11. (d)	Q12. (a)
Q13. (d)	Q14. (b)	Q15. (c)	

Answer key to MCQ : ME (Chapter - II)

Q1. (b)	Q2. (c)	Q3. (b)	Q4. (b)
Q5. (d)	Q6. (c)	Q7. (a)	Q8. (b)
Q9. (b)	Q10. (c)	Q11. (b)	Q12. (b)
Q13. (b)	Q14. (b)	Q15. (c)	

Answer key to MCQ : ME (Chapter - III)

Q1. (b)	Q2. (c)	Q3. (b)	Q4. (b)
Q5. (b)	Q6. (c)	Q7. (b)	Q8. (b)
Q9. (c)	Q10. (b)	Q11. (c)	Q12. (b)
Q13. (a)	Q14. (b)	Q15. (c)	

ANSWER KEY TO MCQ: PDLs

Answer key to MCQ: PDLs (Chapter - I)

Q1. (b)	Q2. (c)	Q3. (a)	Q4. (b)
Q5. (d)	Q6. (b)	Q7. (b)	Q8. (a)
Q9. (b)	Q10. (b)	Q11. (b)	Q12. (c)
Q13. (b)	Q14. (b)	Q15. (a)	Q16. (b)
Q17. (a)	Q18. (b)	Q19. (d)	Q20. (a)

Answer key to MCQ: PDLs (Chapter - II)

Q1. (c)	Q2. (c)	Q3. (b)	Q4. (a)
Q5. (c)	Q6. (a)	Q7. (b)	Q8. (b)
Q9. (b)	Q10. (b)	Q11. (c)	Q12. (c)
Q13. (b)	Q14. (a)	Q15. (b)	Q16. (c)
Q17. (b)	Q18. (b)	Q19. (d)	Q20. (b)

Answer key to MCQ: PDLs (Chapter - III)

Q1. (c)	Q2. (b)	Q3. (b)	Q4. (c)
Q5. (c)	Q6. (b)	Q7. (b)	Q8. (b)
Q9. (c)	Q10. (b)	Q11. (c)	Q12. (b)
Q13. (b)	Q14. (c)	Q15. (b)	Q16. (b)
Q17. (a)	Q18. (b)	Q19. (b)	Q20. (d)

Answer key to MCQ: PDLs (Chapter - IV)

Q1. (a)	Q2. (b)	Q3. (b)	Q4. (c)
Q5. (a)	Q6. (b)	Q7. (b)	Q8. (d)
Q9. (b)	Q10. (b)	Q11. (b)	Q12. (c)
Q13. (c)	Q14. (b)	Q15. (b)	Q16. (b)
Q17. (b)	Q18. (b)	Q19. (c)	Q20. (b)

Answer key to MCQ: PDLs (Chapter-V)

Q1. (b)	Q2. (b)	Q3. (c)	Q4. (a)
Q5. (b)	Q6. (b)	Q7. (b)	Q8. (d)
Q9. (b)	Q10. (b)	Q11. (b)	Q12. (c)
Q13. (b)	Q14. (b)	Q15. (b)	Q16. (c)
Q17. (a)	Q18. (b)	19. (b)	Q20. (a)

ANSWER KEYS TO MCQ : CS

Answer key to MCQ: CS (Chapter - I)

Q1. (c)	Q2. (b)	Q3. (c)	Q4. (b)
Q5. (b)	Q6. (a)	Q7. (b)	Q8. (c)
Q9. (b)	Q10. (d)	Q11. (a)	Q12. (a)
Q13. (a)	Q14. (c)	Q15. (a)	

Answer key to MCQ: CS (Chapter - II)

Q1. (c)	Q2. (b)	Q3. (b)	Q4. (b)
Q5. (b)	Q6. (c)	Q7. (b)	Q8. (c)
Q9. (b)	Q10. (b)	Q11. (d)	Q12. (d)
Q13. (d)	Q14. (b)	Q15. (d)	

Answer key to MCQ: CS (Chapter - III)

Q1. (c)	Q2. (a)	Q3. (c)	Q4. (b)
Q5. (b)	Q6. (c)	Q7. (b)	Q8. (b)
Q9. (b)	Q10. (c)	Q11. (b)	Q12. (b)
Q13. (c)	Q14. (b)	Q15. (b)	

Answer key to MCQ: CS (Chapter - IV)

Q1. (b)	Q2. (c)	Q3. (b)	Q4. (c)
Q5. (a)	Q6. (a)	Q7. (c)	Q8. (a)
Q9. (c)	Q10. (b)	Q11. (c)	Q12. (b)
Q13. (b)	Q14. (c)	Q15. (b)	

Answer key to MCQ: CS (Chapter - V)

Q1. (b)	Q2. (c)	Q3. (b)	Q4. (a)
Q5. (c)	Q6. (b)	Q7. (b)	Q8. (c)
Q9. (a)	Q10. (a)	Q11. (d)	Q12. (a)
Q13. (a)	Q14. (a)	Q15. (a)	

ANSWER KEYS TO MCQ : CC

Answer key to MCQ: CC (Chapter - I)

Q1. (b)	Q2. (b)	Q3. (b)	Q4. (c)
Q5. (d)	Q6. (b)	Q7. (b)	Q8. (b)
Q9. (d)	Q10. (c)	Q11. (b)	Q12. (b)
Q13. (b)	Q14. (b)	Q15. (c)	

Answer key to MCQ: CC (Chapter - II)

Q1. (b)	Q2. (b)	Q3. (a)	Q4. (c)
Q5. (a)	Q6. (b)	Q7. (c)	Q8. (a)
Q9. (b)	Q10. (b)	Q11. (b)	Q12. (b)
Q13. (c)	Q14. (b)	Q15. (d)	

ANSWER KEYS TO MCQ : IC

Answer key to MCQ: IC (Chapter - I)

Q1. (c)	Q2. (a)	Q3. (a)	Q4. (d)
Q5. (b)	Q6. (b)	Q7. (b)	Q8. (a)
Q9. (a)	Q10. (d)	Q11. (b)	Q12. (d)
Q13. (d)	Q14. (c)	Q15. (c)	

Answer key to MCQ: IC (Chapter - II)

Q1. (a)	Q2. (a)	Q3. (c)	Q4. (d)
Q5. (c)	Q6. (b)	Q7. (b)	Q8. (b)
Q9. (b)	Q10. (a)	Q11. (c)	Q12. (d)
Q13. (c)	Q14. (a)	Q15. (b)	

ANSWER KEYS TO MCQ : PMW

Answer key to MCQ: PMW (Chapter - I)

Q1. (c)	Q2. (b)	Q3. (c)	Q4. (b)
Q5. (c)	Q6. (c)	Q7. (c)	Q8. (b)
Q9. (c)	Q10. (b)	Q11. (b)	Q12. (b)
Q13. (b)	Q14. (c)	Q15. (d)	

Answer key to MCQ: PMW (Chapter - II)

Q1. (b)	Q2. (d)	Q3. (c)	Q4. (b)
Q5. (b)	Q6. (c)	Q7. (b)	Q8. (c)
Q9. (b)	Q10. (a)	Q11. (b)	Q12. (c)
Q13. (b)	Q14. (b)	Q15. (d)	

Answer key to MCQ: PMW (Chapter - III)

Q1. (b)	Q2. (c)	Q3. (d)	Q4. (c)
Q5. (c)	Q6. (b)	Q7. (b)	Q8. (b)
Q9. (b)	Q10. (c)	Q11. (b)	Q12. (c)
Q13. (c)	Q14. (a)	Q15. (b)	

Answer key to MCQ: PMW (Chapter - IV)

Q1. (b)	Q2 (c)	Q3 (b)	Q4 (d)
Q5 (b)	Q6 (c)	Q7 (b)	Q8 (c)
Q9 (c)	Q10 (d)	Q11 (a)	Q12 (b)
Q13 (c)	Q14 (b)	Q15 (b)	

Answer key to MCQ: PMW (Chapter - IV)

Q1 (b)	Q2 (b)	Q3 (c)	Q4 (b)
Q5 (b)	Q6 (b)	Q7 (b)	Q8 (b)
Q9 (d)	Q10 (b)	Q11 (a)	Q12 (a)
Q13 (c)	Q14 (b)	Q15 (c)	

Answer key to MCQ: PMW (Chapter - VI)

Q1 (c)	Q2 (c)	Q3 (b)	Q4 (b)
Q5 (c)	Q6 (b)	Q7 (c)	Q8 (b)
Q9 (b)	Q10 (b)	Q11 (b)	Q12 (b)
Q13 (b)	Q14 (c)	Q15 (c)	

Answer key to MCQ: PMW (Chapter - VII)

Q1 (d)	Q2 (c)	Q3 (c)	Q4 (c)
Q5 (a)	Q6 (b)	Q7 (d)	Q8 (c)
Q9 (c)	Q10 (a)	Q11 (c)	Q12 (c)
Q13 (c)	Q14 (b)	Q15 (d)	

Answer key to MCQ: PMW (Chapter - VIII)

Q1. (a)	Q2. (b)	Q3. (a)	Q4. (b)
Q5. (d)	Q6. (d)	Q7. (a)	Q8. (b)
Q9. (c)	Q10. (b)	Q11. (c)	Q12. (c)
Q13. (b)	Q14. (d)	Q15. (c)	

Answer key to MCQ: PMW (Chapter - IX)

Q1. (a)	Q2. (d)	Q3. (a)	Q4. (a)
Q5. (a)	Q6. (d)	Q7. (c)	Q8. (d)
Q9. (b)	Q10. (d)	Q11. (a)	Q12. (d)
Q13. (a)	Q14. (d)	Q15. (d)	

ANSWER KEY :
MULTIPLE CHOICE
QUESTIONS
(MCQ)